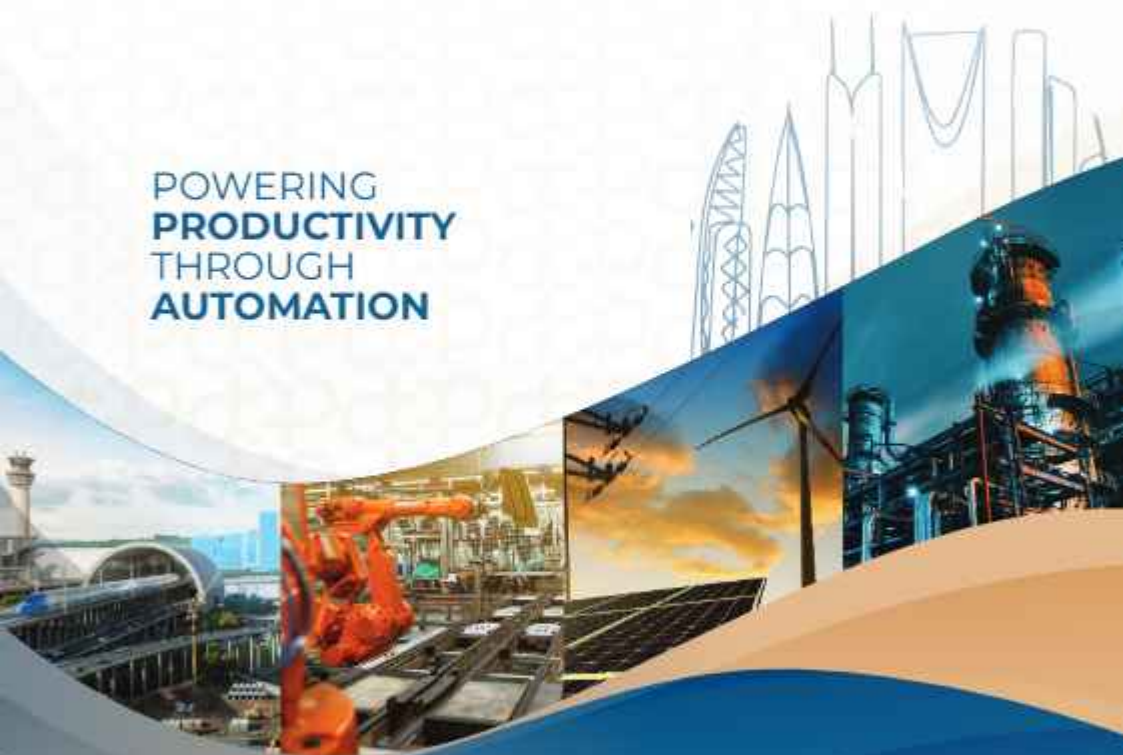




دیونر آند تایدز سولوشنز  
**Dunes and Tides  
Solutions**

POWERING  
**PRODUCTIVITY**  
THROUGH  
**AUTOMATION**



**PRODUCT  
CATALOGUE**

[www.duneandtides.com](http://www.duneandtides.com)

## ABOUT US

Dunes & Tides Solutions Company, is a leading manufacturer and solution provider specializing in Electronics Interface Modules, Custom-built Cable Assemblies, Fiber Optic Patch Panel, Patch Cords, and Interconnection Solutions for industrial automation. We serve critical sectors including Oil & Gas, Refinery, Power, Water, Process Automation, Manufacturing, and Infrastructure, delivering high-quality, reliable, and scalable products engineered for demanding environments.

Our expertise spans the design, development, and delivery of world-class electrical, networking, Fiber Optic and automation solutions that drive industrial performance with efficiency and reliability.

The company is proud to be a trusted partner to a host of discerning companies, offering wide range of process control instrumentation & automation products for varied applications.

Guided by a commitment to innovation, global quality standards, and customer success, we not only manufacture cutting-edge products but also offer strategic collaborations, and comprehensive pre-sales and post-sales support. This holistic approach ensures seamless performance, long-term value, and sustainable growth for our clients.

## APPLICATIONS

Our networking, Interface & control Instrumentation products encompass a comprehensive range of high quality, precision instruments, meticulously designed to cater to the diverse needs of various industries.

We take pride in delivering a high degree of aesthetics, ergonomics, exceptional precision and reliability in each instrument, and our commitment to quality has helped establish us as a trusted name in the industry.

## PRODUCTS FOR NETWORKING, INTERFACE & INSTRUMENTATION SYSTEMS



**Network Cabling Solutions**  
Ethernet Connectivity in  
Automation, Data Centre



**Fiber Optic LIU Solutions**  
Fiber Optic Connectivity  
in Automation, Data Centre



**Industrial Signal Interface**  
Automation & Control Systems



**Loop Powered Indicators**  
Process Measurement



**Digital Indicators & Controllers**  
Process Measurement & Monitoring



**Temperature Scanner**  
Industrial process monitoring

## APPLICATIONS



*Fan Monitoring & Controller  
Fan fail detection & temp.  
monitoring*



*Relative Humidity & temperature  
monitoring Controller.*



*Automatic Static  
AC Power Switching  
(Single Phase)*



*Pre-engineered Cable Assemblies  
System to Marshalling Interfacing*



*Electronics Interface Modules  
Marshalling to Field  
Interfacing*



*Panel Utility Components  
Automation panel bought outs*

DRIVEN BY **INNOVATION**,  
DEFINED BY **QUALITY**,  
TRUSTED **WORLDWIDE**.



# PRODUCT PORTFOLIO

01. Network Cabling & Optical FiberConnectivity
02. Industrial Signal Interface & Measurement Systems
03. Digital Indicators & Controllers (Panel Mount)
04. Digital Indicators & Controllers (Field Mount)
05. Loop Powered Indicators
06. Standard Relay Interface Modules
07. Passive Interface Modules
08. Electronics Interface Modules (Red. & Non-Red.)
09. Pre-engineered Cable Assemblies
10. Fan Monitoring & Controllers
11. Temperature & Humidity Indicators
12. Temperature Scanner
13. Panel Utilities Components
14. AC Static Switch (ATS)
15. Modbus Converters
16. Static Grounding Relays
17. Customised Pre-Engineered Cable Assemblies



## NETWORK CABLING & OPTICAL FIBER CONNECTIVITY



### Fiber Optic LIU- Din Mount

- Compact, Rugged & Din Mount
- Mild Steel or Aluminium Housing
- Available in 4, 6, 12 Port, Duplex Adapter
- Fully Loaded with Adapter, Pigtails
- Slicing Tray upto 24 fibres with protection sleeves
- Suitable for Corrosion free environment



### Fiber Optic LIU- Rack Mount

- Rack Mount with Sliding Drawer 1U, 2U/4U
- Light weight with Aluminium Housing
- Available in 12, 24, 48 Port, Duplex Adapter
- Fully Loaded with Adapter, Pigtails
- Slicing Tray upto 96 fibres with protection sleeves
- Suitable for Corrosion free environment



### Fiber Optic Patch Cords

- Fiber Type Single Mode (OS1/OS2) or Multi-Mode (OM3/OM4/OM3/OM4/OM5)
- Connector Types LC / SC / ST (simplex or duplex)
- Insertion Loss Typically  $\leq 0.2$  dB (Single Mode)
- $\leq 0.3$  dB (Multi-Mode)
- Jacket Material LSZH / OFNR
- Polish Type UPC / APC (SM) and PC for MM
- Compliance Standards TIA/EIA-568, IEC 61754, RoHS, Telcordia GR-326



### Copper Structured Cabling

- Ethernet LAN Cable CAT5e / CAT6 / CAT6A / CAT7 / CAT8, 4 Pair Twisted, 23 AWG-32 AWG
- Jacket type UTP/STP/FTP/SFTP
- Compliance Standards ANSI/TIA-568.2-D
- ISO/IEC 11801
- STP Patch Cords CAT6/CAT6A- Custom Lengths available (0.5 to 30 Meter)



### RJ45 Patch Panel and Cable Management

- Standard 19-inch rack-mount compatibility
- Patch panel height 1U (24 ports) / 2U (48 ports)
- Compatible with T568A and T568B wiring schemes
- Unshielded (UTP) or Shielded (STP/FTP) versions



### RJ45 Connector & Keystone Jack

- Shielded & Unshielded RJ45 Modular Plugs
- Metallic (Nickel-Plated Zinc Alloy) Housing
- Gold-Plated Contacts ( $\geq 50$ µinch)
- Suitable for CAT5e / CAT6 / CAT6A
- Unshielded (UTP) or Shielded (STP/FTP)
- Supports 22-26 AWG solid and stranded copper conductors
- Keystone Jack- RJ45 CAT6/CAT6A/CAT7

# INDUSTRIAL SIGNAL INTERFACE & MEASUREMENT SYSTEMS



**Analog Signal Isolator  
(DTT-530)**

- Compact Din Rail Mount Housing
- 4-20mA/0-10V Input/Output Isolated Module
- Three-way optical and galvanic isolation between Input, Output & Power Supply
- Enhanced load-driving strength on output signal
- Aux Power Supply DC or AC (Pre specified)



**Isolated Analog Signal  
Splitter (Dual Output) (DTT-532)**

- Compact Din Rail Mount Housing
- Signal Input & Dual Analog Output Module (4-20mA/0-10V)
- Optical and galvanic isolation between Input, Output & Power Supply
- Front-panel zero and span adjustment for each output



**Analog Pick Value Isolator  
(Dual Input) (DTT-601/501)**

- Compact Din Rail Mount Housing
- Dual Input (0-10V/4-20mA) & Single Analog Output Module (4-20mA)
- Optical and galvanic isolation between Input, Output & Power Supply
- Front-panel zero and span adjustment for each output



**RTD to DC Current  
Transducer (DTT-510)**

- RTD Pt-100 Sensor (3-Wire Input)
- Isolated Analog Output 4-20mA
- Three-way optical and galvanic isolation between Input, Output & Power Supply
- High Accuracy & Linearity to RTD Signal
- Aux Power Supply DC or AC (Pre specified)



**Thermocouple to DC Current  
Transducers (DTT-515)**

- Thermocouple sensor input (J, K, R, S)
- Isolated Analog Output 4-20mA
- Three-way optical and galvanic isolation between Input, Output & Power Supply
- High Accuracy & Linearity to T/C Signal
- Aux Power Supply DC or AC (Pre specified)



**DC Voltage Isolator  
Transducer (DTT-505)**

- Compact Din Rail Mount Housing
- DC Current (75 mV from Shunt) or DC Voltage (up to 500 VDC) Input options
- Isolated 4-20mA DC Output proportional to Input Voltage
- High load driving capacity of output signal
- Excellent Linearity and accuracy

# INDUSTRIAL SIGNAL INTERFACE & MEASUREMENT SYSTEMS



**DC Voltage Signal  
Isolator DTT-535**

- DC Input Voltage upto 500 VDC
- Isolated Analog Output 4-20mA/0-10VDC
- Three-way optical and galvanic isolation between Input, Output & Power Supply
- Auxiliary voltage output to drive external potentiometer for variable input.
- Aux Power Supply DC or AC (Pre specified)



**Current to Voltage  
Transducer DTT-545**

- Input 4-20mA DC current input
- Isolated Analog Output Voltage 0-10VDC
- Three-way optical and galvanic isolation between Input, Output & Power Supply
- High Accuracy & Linearity to RTD Signal
- Aux Power Supply DC or AC (Pre specified)



**Resistance Isolating  
Transducer DTT-540**

- Variable Resistance Or Potentiometer Input
- Isolated Analog Output Voltage 4-20mA Or 0-10V DC
- Three-way optical and galvanic isolation between Input, Output & Power Supply
- Aux Power Supply DC or AC (Pre-specified)



**RTD to DC Current Transducer  
(Dual Output) DTT-512**

- RTD Pt-100 Sensor (3- Wire Input)
- Isolated Dual Analog Output (2x 4-20mA)
- Three-way optical and galvanic isolation between Input, Output & Power Supply
- High Accuracy & Linearity to RTD Signal
- Aux Power Supply DC or AC (Pre specified)



**Thermocouple to DC Current  
Transducer (Dual Output) DTT-517**

- Thermocouple sensor input (J, K, R, S)
- Isolated Dual Analog Output (2 x 4-20mA)
- Three-way optical and galvanic isolation between Input, Output & Power Supply
- High Accuracy & Linearity to T/C Signal
- Aux Power Supply DC or AC (Pre specified)



**Resistance Multiplier (Dual-  
Output) Transducer (DTT-542)**

- Variable Resistance Or Potentiometer Input
- Isolated Dual Analog Output (2 x 4-20mA)
- Three-way optical and galvanic isolation between Input, Output & Power Supply
- High load driving capacity for each output.
- Aux Power Supply DC or AC (Pre specified)

# INDUSTRIAL SIGNAL INTERFACE & MEASUREMENT SYSTEMS



**AC Voltage Isolating  
Transducer DTT-550**

- AC Voltage input signal
- Analog DC Current or DC Voltage output options
- Three-port Optical and Galvanic Isolation between Input, Output and Power Supply
- Slim rugged DIN rail mount execution.



**AC Current Isolating  
Transducer DTT-420**

- 0 to 1A or 0 to 5A AC current signal input from CT secondary
- Output signal of 4 to 20 mA or 0 to 10 VDC.
- Excellent accuracy and linearity to input AC current.
- Three-port Optical and Galvanic Isolation between Input, Output and Power Supply



**Line Frequency  
Transducer DTT-525**

- 45 to 65 Hz power line frequency input
- 4-20 mA DC isolated analog output linear to frequency
- Front accessible zero and span calibration
- High load driving capacity of output signal.



**Signal Isolating Repeater  
(Four Outputs) DTT-534**

- Various Analog and field Sensor input signal options
- Four independent and isolated output signals
- Front accessible Zero and Span calibration for each output.
- High load driving capacity of each output
- Aux Power Supply DC or AC (Pre-specified)



**Head Mount Temp. Transducer  
RTD Sensor DTT-52**

- RTD Pt100 (3 Wire) Input
- Direct Sensor Head Mount
- Non-Isolated 4-20mA DC Two-wire Analog Current Output
- Front accessible zero and span Calibration



**Head Mount Temp. Transducer  
T/C Sensor DTT-55**

- Thermocouple sensor Input (J, K, R, S)
- Direct Sensor Head Mount
- Non-Isolated 4-20mA DC Two-wire Analog Current Output
- Front accessible zero and span Calibration

# TYPICAL CONFIGURATION

## INPUTS

AC VOLTAGE  
DC VOLTAGE  
AC CURRENT  
DC CURRENT  
MAINS FREQUENCY  
RTD PT-100 (3-W)  
THERMOCOUPLE  
RESISTANCE  
ACTIVE POWER  
REACTIVE POWER  
LOAD CELLS  
LVDT SENSOR  
PULSE FREQUENCY

RTD PT-100 (3-W)  
THERMOCOUPLE



DTT-530



DTT-532



DTT-534



DTT-52



DTT-40

## OUTPUTS

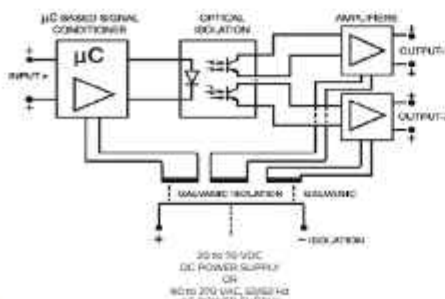
4 - 20 mA DC /  
0 - 10 V DC  
(Single Output)

4 - 20 mA DC /  
0 - 10 V DC  
(Two Outputs)

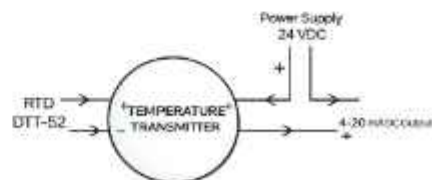
4 - 20 mA DC /  
0 - 10 V DC  
(Four Outputs)

4 - 20 mA DC  
(Two-wire)

## BLOCK DIAGRAM OF ISOLATOR AND TRANSDUCER



## TWO WIRE CONFIGURATION



## PRODUCT SELECTION GUIDE

### DTT SERIES ISOLATORS AND TRANSDUCERS

| Model No.  | Input         |               |               |               |               |              |                 |                | Output        |               | Isolation | Power Supply  |               | Dimensions<br>(HxWxD)<br>mm |
|------------|---------------|---------------|---------------|---------------|---------------|--------------|-----------------|----------------|---------------|---------------|-----------|---------------|---------------|-----------------------------|
|            | DC<br>Current | AC<br>Current | DC<br>Voltage | AC<br>Voltage | STD<br>Pt-100 | Thermocouple | Strain<br>Tanks | Freq-<br>uency | DC<br>Current | DC<br>Voltage |           | AC<br>Voltage | DC<br>Voltage |                             |
|            | I             | I             | V             | H             | B             | T            | E               | F              | C             | O             |           | A             | O             |                             |
| DTT-40     |               |               |               |               | ✓             |              |                 |                | ✓             |               |           | 2-wire        |               | 75x22x10                    |
| DTT-45     |               |               |               |               |               | ✓            |                 |                | ✓             |               |           | 2-wire        |               | 75x22x10                    |
| DTT-52     |               |               |               |               | ✓             |              |                 |                | ✓             |               |           | 2-wire        |               | Head mount                  |
| DTT-55     |               |               |               |               |               | ✓            |                 |                | ✓             |               |           | 2-wire        |               | Head mount                  |
| DTT-405    | ✓             |               | ✓             |               |               |              |                 |                | ✓             | ✓             | ✓         | ✓             |               | 75x55x10                    |
| DTT-405-04 | 4x L          |               | 4x V          |               |               |              |                 |                | 4x C          | 4x O          | ✓         | ✓             |               | 75x55x10                    |
| DTT-420    |               | ✓             |               |               |               |              |                 |                | ✓             | ✓             | ✓         | ✓             | ✓             | 75x55x10                    |
| DTT-422    |               | ✓             |               |               |               |              |                 |                | 2x C          | 2x O          | ✓         | ✓             | ✓             | 75x55x10                    |
| DTT-425    |               |               |               |               |               |              |                 | ✓              | ✓             | ✓             | ✓         | ✓             | ✓             | 75x55x10                    |
| DTT-432    | ✓             |               | ✓             |               |               |              |                 |                | 2x C          | 2x O          | ✓         | ✓             |               | 75x55x10                    |
| DTT-434    | ✓             |               | ✓             |               | ✓             | ✓            | ✓               | ✓              | 4x C          | 4x O          | ✓         | ✓             |               | 75x100x10                   |
| DTT-505    |               |               | ✓             |               |               |              |                 |                | ✓             |               | ✓         | ✓             | ✓             | 100x22x10                   |
| DTT-510    |               |               |               |               | ✓             |              |                 |                | ✓             | ✓             | ✓         | ✓             | ✓             | 100x22x10                   |
| DTT-512    |               |               |               |               | ✓             |              |                 |                | 2x C          | 2x O          | ✓         | ✓             | ✓             | 100x22x10                   |
| DTT-515    |               |               |               |               |               | ✓            |                 |                | ✓             |               | ✓         | ✓             | ✓             | 100x22x10                   |
| DTT-525    |               |               |               |               |               |              |                 | ✓              | ✓             | ✓             | ✓         | ✓             |               | 100x22x10                   |
| DTT-530    | ✓             |               |               |               |               |              |                 |                | ✓             |               | ✓         | ✓             | ✓             | 100x22x10                   |
| DTT-532    | ✓             |               | ✓             |               |               |              |                 |                | 2x C          | 2x O          | ✓         | ✓             | ✓             | 100x22x10                   |
| DTT-534    | ✓             |               | ✓             |               | ✓             | ✓            | ✓               | ✓              | 4x C          | 4x O          | ✓         | ✓             | ✓             | 100x45x10                   |
| DTT-535    |               |               | ✓             |               |               |              | ✓               |                | ✓             | ✓             | ✓         | ✓             | ✓             | 100x22x10                   |
| DTT-540    |               |               |               |               |               |              | ✓               |                | ✓             |               | ✓         | ✓             | ✓             | 100x22x10                   |
| DTT-542    |               |               |               |               |               |              | ✓               |                | 2x C          |               | ✓         | ✓             | ✓             | 100x22x10                   |
| DTT-545    | ✓             |               |               |               |               |              |                 |                |               | ✓             | ✓         | ✓             | ✓             | 100x22x10                   |
| DTT-550    |               |               |               | ✓             |               |              |                 |                | ✓             | ✓             | ✓         | ✓             | ✓             | 100x22x10                   |
| DTT-630    | ✓             |               | ✓             |               |               |              |                 |                | ✓             | ✓             | ✓         | ✓             | ✓             | 75x22x10                    |
| DTT-734    | 4x L          |               | 4x V          |               |               |              |                 |                | 4x C          | 4x O          | ✓         |               | ✓             | 75x90x50                    |

## DIGITAL INDICATORS & CONTROLLERS (PANEL MOUNT)



**Universal Indicator with upto 4 Relay Series DTAF**

- DC/AC Current, DC/AC Voltage, Temperature
- sensors (RTD Pt-100 & Thermocouple) input options
- Up to four Relay change over contacts
- Dual 4-digit LED seven-segment displays
- Analog Retransmission output option



**Digital Indicator with 2 Relays & Modbus Series DTAK**

- DC/AC Current, DC/AC Voltage, Temperature sensors (RTD Pt-100 & Thermocouple) input options
- Up to two Relay change over contacts
- Data communication on RS-485 Modbus RTU option
- Analog Retransmission output



**Digital Bar Graph Indicator Series DTBMX**

- Dual 100 segment LED Bargraph and Dual 4-digit seven segment LED displays
- Single and dual channel options
- Up to 2 control relay outputs per channel
- 4-20 mA DC Retransmission per channel



**Digital Indicator & Controller (72x72 mm) Series DTCY-70**

- DC/AC Current, DC/AC Voltage, Temperature sensors (RTD Pt-100 & Thermocouple) input options
- Up to two Relay changeover contacts and analog retransmission output
- 4-digit 0.5" LED seven-segment display
- AC or DC power supply options



**Digital Indicator & Controller (46x48 mm) Series DTCY-80**

- DC/AC Current, DC/AC Voltage, Temperature sensors (RTD Pt-100 & Thermocouple) input options
- Up to two Relay changeover contacts and analog retransmission output
- 4-digit 0.5" LED seven-segment display
- AC or DC power supply options



**Digital Indicator & Controller (48x96 mm) Series DTCY-90**

- DC/AC Current, DC/AC Voltage, Temperature sensors (RTD Pt-100 & Thermocouple) input options
- Up to two Relay changeover contacts and analog retransmission output
- 4-digit 0.5" LED seven-segment display
- AC or DC power supply options

## DIGITAL INDICATORS & CONTROLLERS (PANEL MOUNT)



**Digital Indicator with Modbus In/Out DTCY-95**

- Analog input and RS-485 Modbus output or RS-485 Modbus input and analog output (unspecified)
- Up to two Relay changeover contacts
- 4-digit 0.5" LED seven-segment display
- AC or DC power supply options



**Digital Indicator & Controller (96x96 mm) Series DTCY-100**

- DC/AC Current, DC/AC Voltage, Temperature sensors (RTD Pt-100 & Thermocouple) input options
- Up to two Relay changeover contacts and analog retransmission output
- 4-digit 0.5" LED seven-segment display
- AC or DC power supply options



**Digital Indicator Controller (4" Display) Series DTCY-110**

- DC/AC Current, DC/AC Voltage, Temperature sensors (RTD Pt-100 & Thermocouple) input options
- Up to two Relay changeover contacts and analog retransmission output
- 4-digit 4" LED seven-segment display
- Field mount Weatherproof execution



**Dual-Channel Digital Indicator Controller Series DTCY-120**

- 4-20 mA DC and RTD (Pt-100) input signal options
- Dual 4-digit seven-segment red LED displays
- Two Relay change over contacts per channel
- Data communication on RS-485 Modbus RTU protocol



**Digital Indicator DTDX-700**

- AC/DC Current, AC/DC Voltage, Temperature Sensor input selection options
- Digital 3 1/2 digit process indicator
- 0.5" LED seven segment display
- Front accessible zero and span calibration



**Digital Indicator DTDXU-709**

- DC/AC Current, DC/AC Voltage, Temperature sensors (RTD Pt-100 & Thermocouple) input options
- Up to two Relay changeover contacts and analog retransmission output
- 4-digit 4" LED seven-segment display
- Field mount Weatherproof execution

## DIGITAL INDICATORS & CONTROLLERS (PANEL MOUNT)



**Digital Indicator Controller (DIN Rail) DTVX-102**

- AC/DC Current, AC/DC Voltage, Temperature Sensor input selection options
- Up to two Relay change over contacts
- Analog Retransmission output option
- Compact DIN Rail mount execution



**Universal PID Controller (96x96 mm) DTPX-102**

- DC Current, DC Voltage, Temperature Sensor (RTD Pt-100 and Thermocouple) inputs
- Dual display for Process Value and Set value with Bar graph display of PID analog output
- 24 VDC Auxiliary Power supply output
- Auto and Manual PID tuning options



**Digital pH Meter DTAPh-713**

- Display range upto 14 pH
- Retransmission for Temperature value
- Two control Relay outputs
- Bright dual line OLED Display

## PRODUCT SELECTION GUIDE

### DIGITAL INDICATORS CONTROLLERS

| Model No. | Input      |            |            |            |              |            |        | Output     |        |        | Power Supply |            | Display     |             | Execution | Dimensions (mm) |
|-----------|------------|------------|------------|------------|--------------|------------|--------|------------|--------|--------|--------------|------------|-------------|-------------|-----------|-----------------|
|           | DC Current | AC Current | DC Voltage | AC Voltage | Thermocouple | RTD Pt-100 | RS-485 | DC Current | RS-485 | Relays | AC Voltage   | DC Voltage | LCD Display | LED Display |           |                 |
|           | L          | U          | V          | H          | T            | R          | M      | Q          | M      | A      | A            | D          | C           | E           |           |                 |

#### DTAF SERIES

|          |   |  |   |  |   |   |  |   |  |   |   |   |             |   |  |          |
|----------|---|--|---|--|---|---|--|---|--|---|---|---|-------------|---|--|----------|
| DTAF-100 | ✓ |  | ✓ |  | ✓ | ✓ |  | ✓ |  |   | ✓ | ✓ | 0.5" & 0.4" | P |  | 96x96x75 |
| DTAF-101 | ✓ |  | ✓ |  | ✓ | ✓ |  | ✓ |  | 1 | ✓ | ✓ | 0.5" & 0.4" | P |  | 96x96x75 |
| DTAF-102 | ✓ |  | ✓ |  | ✓ | ✓ |  | ✓ |  | 2 | ✓ | ✓ | 0.5" & 0.4" | P |  | 96x96x75 |
| DTAF-103 | ✓ |  | ✓ |  | ✓ | ✓ |  | ✓ |  | 3 | ✓ | ✓ | 0.5" & 0.4" | P |  | 96x96x75 |
| DTAF-104 | ✓ |  | ✓ |  | ✓ | ✓ |  | ✓ |  | 4 | ✓ | ✓ | 0.5" & 0.4" | P |  | 96x96x75 |

#### DTAK SERIES

|          |   |  |   |  |   |   |  |   |   |   |   |   |      |   |  |          |
|----------|---|--|---|--|---|---|--|---|---|---|---|---|------|---|--|----------|
| DTAK-91  | ✓ |  | ✓ |  | ✓ | ✓ |  | ✓ | ✓ | 1 | ✓ | ✓ | 0.5" | P |  | 96x48x75 |
| DTAK-92  | ✓ |  | ✓ |  | ✓ | ✓ |  | ✓ | ✓ | 2 | ✓ | ✓ | 0.5" | P |  | 96x48x75 |
| DTAK-92V | ✓ |  | ✓ |  | ✓ | ✓ |  | ✓ | ✓ | 2 | ✓ | ✓ | 0.5" | P |  | 96x48x75 |

#### NOTE

DIN Rail mount execution – D

Panel mount execution – P

Weather-proof execution – W

Rail mount execution – R

Flame-proof execution Aluminum Alloy – X

Flame-proof execution Stainless Steel – S

# PRODUCT SELECTION GUIDE

## DIGITAL INDICATORS CONTROLLERS

| Model No. | Input      |            |            |            |                 |            | Output |            |            | Power Supply |            | Display    |             | Enclosure   | Dimensions (HxWxD) mm |
|-----------|------------|------------|------------|------------|-----------------|------------|--------|------------|------------|--------------|------------|------------|-------------|-------------|-----------------------|
|           | DC Current | AC Current | DC Voltage | AC Voltage | Thermal impulse | STD Pt-100 | RS-485 | DC Current | DC Voltage | Relays       | AC Voltage | DC Voltage | LCD Display | LED Display |                       |
|           | L          | U          | V          | H          | S               | Q          | M      | U          | M          | A            | A          | D          | C           | E           |                       |

### Aph-SERIES

|           |  |  |    |  |  |   |  |   |   |   |   |  |              |  |   |          |
|-----------|--|--|----|--|--|---|--|---|---|---|---|--|--------------|--|---|----------|
| DTAph-703 |  |  | pH |  |  | ✓ |  | ✓ | ✓ | 2 | ✓ |  | 16x1<br>OLED |  | D | 96x96x35 |
|-----------|--|--|----|--|--|---|--|---|---|---|---|--|--------------|--|---|----------|

### DX-SERIES

|           |   |   |   |   |  |   |  |   |  |  |   |   |  |      |   |           |
|-----------|---|---|---|---|--|---|--|---|--|--|---|---|--|------|---|-----------|
| DTDx-700  | ✓ | ✓ | ✓ | ✓ |  | ✓ |  | ✓ |  |  | ✓ | ✓ |  | 0.5" | D | 48x96x75  |
| DTDxU-709 | ✓ | ✓ |   |   |  |   |  | ✓ |  |  | ✓ | ✓ |  | 0.5" | D | 48x96x110 |

### BMX-SERIES

|          |   |  |  |  |  |  |  |   |  |   |   |  |  |      |   |            |
|----------|---|--|--|--|--|--|--|---|--|---|---|--|--|------|---|------------|
| DTBMX-S1 | ✓ |  |  |  |  |  |  | ✓ |  | 1 | ✓ |  |  | 0.3" | D | 80x160x150 |
| DTBMX-S2 | ✓ |  |  |  |  |  |  | ✓ |  | 2 | ✓ |  |  | 0.3" | D | 80x160x150 |

### VX SERIES

|          |   |  |   |  |   |   |  |   |  |   |   |   |  |           |   |           |
|----------|---|--|---|--|---|---|--|---|--|---|---|---|--|-----------|---|-----------|
| DTVx-302 | ✓ |  | ✓ |  | ✓ | ✓ |  | ✓ |  | 2 | ✓ | ✓ |  | 0.5"/0.4" | D | 75x55x110 |
|----------|---|--|---|--|---|---|--|---|--|---|---|---|--|-----------|---|-----------|

### PX SERIES

|          |   |  |   |  |   |   |  |   |   |   |   |   |  |           |   |           |
|----------|---|--|---|--|---|---|--|---|---|---|---|---|--|-----------|---|-----------|
| DTPx-302 | ✓ |  | ✓ |  | ✓ | ✓ |  | ✓ | ✓ | 2 | ✓ | ✓ |  | 0.5"/0.4" | D | 96x96x110 |
|----------|---|--|---|--|---|---|--|---|---|---|---|---|--|-----------|---|-----------|

### CY SERIES

|          |     |  |   |   |   |     |  |     |   |   |   |   |  |      |   |            |
|----------|-----|--|---|---|---|-----|--|-----|---|---|---|---|--|------|---|------------|
| DTCY-70  | ✓   |  | ✓ | ✓ | ✓ | ✓   |  | ✓   |   |   | ✓ | ✓ |  | 0.5" | P | 72x72x55   |
| DTCY-72  | ✓   |  | ✓ | ✓ | ✓ | ✓   |  | ✓   |   | 2 | ✓ | ✓ |  | 0.5" | P | 72x72x55   |
| DTCY-80  | ✓   |  | ✓ | ✓ | ✓ | ✓   |  | ✓   |   |   | ✓ | ✓ |  | 0.3" | P | 48x48x75   |
| DTCY-82  | ✓   |  | ✓ | ✓ | ✓ | ✓   |  | ✓   |   | 2 | ✓ | ✓ |  | 0.3" | P | 48x48x75   |
| DTCY-90  | ✓   |  | ✓ | ✓ | ✓ | ✓   |  | ✓   |   |   | ✓ | ✓ |  | 0.5" | P | 48x96x55   |
| DTCY-92  | ✓   |  | ✓ | ✓ | ✓ | ✓   |  | ✓   |   | 2 | ✓ | ✓ |  | 0.5" | P | 48x96x55   |
| DTCY-100 | ✓   |  | ✓ | ✓ | ✓ | ✓   |  | ✓   |   |   | ✓ | ✓ |  | 0.5" | P | 96x96x55   |
| DTCY-102 | ✓   |  | ✓ | ✓ | ✓ | ✓   |  | ✓   |   | 2 | ✓ | ✓ |  | 0.5" | P | 96x96x55   |
| DTCY-110 | ✓   |  | ✓ | ✓ | ✓ | ✓   |  | ✓   |   |   | ✓ | ✓ |  | 4"   | A | 160x435x70 |
| DTCY-112 | ✓   |  | ✓ | ✓ | ✓ | ✓   |  | ✓   |   | 2 | ✓ | ✓ |  | 4"   | A | 160x435x70 |
| DTCY-120 | 2XL |  |   |   |   | 2XR |  | 2XG | ✓ | 4 | ✓ | ✓ |  | 0.5" | D | 96x96x110  |
| DTCY-122 | 2XL |  |   |   |   | 2XR |  | 2XG | ✓ | 4 | ✓ | ✓ |  | 0.5" | D | 96x96x110  |

#### NOTE:

DIN Rail mount enclosure - D  
Panel mount enclosure - P

Weather-proof enclosure - W  
Wall mount enclosure - A

Flame-proof enclosure Aluminum Alloy - X  
Flame-proof enclosure Stainless Steel - S

## DIGITAL INDICATORS & CONTROLLERS (FIELD MOUNT)



**Digital Indicator  
(Flameproof) DTX-70**

- 4-20 mA DC Current, DC Voltage, RTD (Pt-100) or Thermocouple Input option
- PESO certified Flameproof enclosure
- Analog retransmission output
- ACor DC Power Supply option



**Digital Indicator Controller  
(Flameproof) DTX-72X**

- 4-20 mA DC Current, DC Voltage, RTD (Pt-100) or Thermocouple Input option
- Up to 2 control relay outputs
- IP66 PESO certified Flameproof enclosure
- ACor DC Power Supply option
- Suitable for Gas Groups IIA/IIA



**Digital Indicator Controller  
(Weatherproof) DTX-72W**

- 4-20 mA DC Current, DC Voltage, RTD (Pt-100) or Thermocouple Input option
- Up to 2 control relay outputs
- IP66 Industrial grade Polycarbonate enclosure with safety glass window
- ACor DC Power Supply options



**Modbus Indicator Controller  
(Flameproof) DTX-97X**

- 4-20 mA DC Current, DC Voltage, RTD (Pt-100) or Thermocouple Input option
- Up to 2 control relay outputs
- IP66 Industrial grade Polycarbonate enclosure with safety glass window
- ACor DC Power Supply options



**PID Controller  
(Flameproof) DTX-102X**

- 4-20 mA DC, 0-10 VDC, RTD Pt-100 and Thermocouple (J,K,R,S) Input selection
- Universal input selection options
- Auto and Manual PID tuning option
- 4 to 20 mA DC Retransmission / PID control
- output (selectable)
- RS-485 on Modbus RTU communication



**Dual channel Indicator  
Controller DTX-122**

- 4-20 mA DC / RTD-Pt-100 Input signal options
- 4-20 mA DC retransmission output for each input
- Two Relay change over contacts per channel
- Data communication on RS-485 Modbus RTU protocol

## PRODUCT SELECTION GUIDE

### FIELD MOUNT DIGITAL INDICATORS CONTROLLERS

| Model No. | Input      |            |            |            |               |           |        | Output     |        |        | Power Supply |            | Display     |             | Enclosure | Dimensions (HxWxD) mm |
|-----------|------------|------------|------------|------------|---------------|-----------|--------|------------|--------|--------|--------------|------------|-------------|-------------|-----------|-----------------------|
|           | DC Current | AC Current | DC Voltage | AC Voltage | Thermal Input | RTD Pt100 | RS-485 | DC Current | RS-485 | Relays | AC Voltage   | DC Voltage | LCD Display | LED Display |           |                       |
|           | I          | U          | V          | H          | T             | P         | M      | C          | M      | A      | A            | D          | C           | E           |           |                       |
| DTX-70W   | ✓          |            |            |            |               | ✓         |        | ✓          |        |        | ✓            | ✓          |             | ✓           | W         | 100x90x55             |
| DTX-70S   | ✓          |            |            |            |               | ✓         |        | ✓          |        |        | ✓            | ✓          |             | ✓           | S         | 125x125x75            |
| DTX-72X   | ✓          |            |            |            |               | ✓         |        | ✓          |        | 2      | ✓            | ✓          |             | ✓           | X         | 130x140x130           |
| DTX-72W   | ✓          |            |            |            |               | ✓         |        | ✓          |        | 2      | ✓            | ✓          |             | ✓           | W         | 90x100x55             |
| DTX-72S   | ✓          |            |            |            |               | ✓         |        | ✓          |        | 2      | ✓            | ✓          |             | ✓           | S         | 125x125x75            |
| DTX-97X   | ✓          |            |            |            |               | ✓         |        | ✓          | ✓      | 2      | ✓            | ✓          | ✓           |             | X         | 130x140x130           |
| DTX-92X   | ✓          |            | ✓          |            | ✓             | ✓         |        | ✓          | ✓      | 2      | ✓            | ✓          |             | ✓           | X         | 130x140x130           |
| DTX-120   | ✓          |            |            |            |               | ✓         |        | ✓          | ✓      |        | ✓            | ✓          |             |             | X         | 130x140x130           |
| DTX-122   | ✓          |            |            |            |               | ✓         |        | ✓          | ✓      | 4      | ✓            | ✓          |             | ✓           | X         | 130x140x130           |

#### NOTE:

Modular enclosure - M

Weather-proof enclosure - W

Flame-proof enclosure Aluminum Alloy - X

Flame-proof enclosure Stainless Steel - S

## LOOP POWERED INDICATORS



**Loop Powered LCD Indicator DTLPI-706CX**

- Standard 4 to 20 mA DC current loop powered operation (no external power supply required)
- Intrinsically Safe Exi certified by CIMFR and PESO certified Flameproof Exd enclosure
- Low Forward Voltage Drop
- SS mounting accessories kit



**Loop Powered LED Indicator DTLPI-708EX**

- Standard 4 to 20 mA DC current loop powered operation (no external power supply required)
- Intrinsically Safe Exi certified by CIMFR and PESO certified Flameproof Exd enclosure
- IP66 certified ingress protection
- Low Forward Voltage Drop



**Loop Powered Indicator with control FLP DTLPI-73SX**

- Standard 4 to 20 mA DC current loop powered display (24VDC external power supply required for Relay driving)
- PESO certified Flameproof Exd enclosure (IP66)
- 4 digit, 0.7" LCD seven-segment display
- Three control Relay potential free contacts



**Loop Powered LED Indicator (compact) DTM4X-708**

- Standard 4 to 20 mA DC current loop powered operation (no external power supply required)
- PESO certified Flameproof Exd enclosure
- 0.4" seven-segment LED display
- Low Forward Voltage Drop



**Loop Powered LED Temp Indicator DTMX-708**

- Standard 4 to 20 mA DC current loop powered operation (24 VDC loop voltage for Transmitter powering required)
- Built-in Temperature Transmitter for direct RTD sensor input
- 0.4" seven-segment LED display
- PESO certified Flameproof Exd enclosure



**Loop Powered Indicator Panel Mount DTMX-708**

- Standard 4 to 20 mA DC current loop powered operation (no external power supply required)
- LCD and LED seven-segment display options
- Fully configurable for zero, span and decimal settings
- Low Forward Voltage Drop

## PRODUCT SELECTION GUIDE

### LOOP POWERED INDICATORS

| Model No.    | Input      |            |            |            |               |            |        | Output     |        |        | Power Supply |            | Display     |             | Excitation | Dimensions (HxWxD) mm |
|--------------|------------|------------|------------|------------|---------------|------------|--------|------------|--------|--------|--------------|------------|-------------|-------------|------------|-----------------------|
|              | DC Current | AC Current | DC Voltage | AC Voltage | Thermo-Couple | RTD Pt-100 | RS-485 | DC Current | RS-485 | Relays | AC Voltage   | DC Voltage | LED Display | LED Display |            |                       |
|              | L          | U          | V          | H          | T             | R          | M      | G          | H      | A      | A            | G          | C           | E           |            |                       |
| DTLPI-708CM  | ✓          |            |            |            |               |            |        | ✓          |        |        |              |            | ✓           | 0.3"        | M          | 66x20                 |
| DTLPI-708CX  | ✓          |            |            |            |               |            |        | ✓          |        |        |              |            | ✓           | 0.3"        | X          | 140x140x130           |
| DTLPI-708CK  | ✓          |            |            |            |               |            |        | ✓          |        |        |              |            | ✓           | 0.3"        | X          | 140x140x130           |
| DTLPI-708CW  | ✓          |            |            |            |               |            |        | ✓          |        |        |              |            | ✓           | 0.3"        | W          | 100x90x83             |
| DTLPI-708EW  | ✓          |            |            |            |               |            |        | ✓          |        |        |              |            | ✓           | 0.3"        | W          | 100x90x83             |
| DTLPI-708CS  | ✓          |            |            |            |               |            |        | ✓          |        |        |              |            | ✓           | 0.3"        | S          | 125x125x115           |
| DTLPI-708ES  | ✓          |            |            |            |               |            |        | ✓          |        |        |              |            | ✓           | 0.3"        | S          | 125x125x115           |
| DTLPI-708X   | ✓          |            |            |            |               |            |        | ✓          |        | 3      |              |            | ✓           |             | X          | 140x140x130           |
| DTMA6-708    | ✓          |            |            |            |               |            |        | ✓          |        |        |              |            |             | 0.4"        | X          | 110x110x100           |
| DTLPI-708CPX | ✓          |            |            |            |               |            |        | ✓          |        |        |              |            | ✓           | 0.3"        | X          | 48x96x75              |
| DTLPI-708EPH | ✓          |            |            |            |               |            |        | ✓          |        |        |              |            | ✓           | 0.3"        | X          | 48x96x75              |
| DTMT6-708    | ✓          |            |            |            |               |            |        | ✓          |        |        |              |            |             | 0.4"        | X          | 110x110x100           |

#### NOTE:

Modular excitation - M  
Wall mount excitation - A

Panel mount excitation - P  
Flame-proof excitation Aluminum Alloy - X

Weather-proof excitation - W  
Flame-proof excitation Stainless Steel - S

## STANDARD RELAY INTERFACE MODULE



**DC Relay Interface Module**

- 12/24 VDC Relay coil options
- Screw Terminals suitable upto 2.5Sqmm.
- No. of channels 1, 2, 4, 8, 16 & 32 for 1C/O Relay Contact & 1, 2, 4, 8, 16 for 2C/O Relay Contact
- Max. permissible current 5 Amp per branch
- Mounting Din Rail



**AC Relay Interface Module With Fuse Protection**

- 110/230 VAC Relay coil options
- Screw Terminals suitable upto 2.5Sqmm.
- No. of channels 4, 8, 16 for 1C/O and 3C/O Relay Contact
- Max. permissible current 5 Amp per branch
- Mounting Din Rail



**DC Relay Interface Module With Fuse Protection**

- DC/AC Relay coil options
- Fuse & Fuse Fail Indication per channel
- Screw Terminals suitable upto 2.5Sqmm.
- No. of channels 4, 8 & 16 for 1C/O and 2C/O Relay Contact
- Max. permissible current 5 Amp per branch
- Mounting Din Rail

## PASSIVE INTERFACE MODULE



**ELCO Interface Module**

- Industrial Interconnection Module
- Screw Terminals suitable upto 2.5Sqmm.
- No. of positions 38 & 56 Pin Male
- Max. Operating Voltage 25VAC/50VDC
- Max. permissible current 2A per branch
- Mounting Din Rail



**D-Sub Interface Module**

- Industrial Interconnection Module
- Screw terminals suitable upto 2.5Sqmm.
- No. of Position 25, 37 & 50 Pin male or female
- Max. Operating Voltage 25VAC/ 30VDC
- Max. permissible current 1.5A per branch
- Mounting Din Rail



**FRC Interface Module**

- Industrial Interconnection Module
- Screw terminals suitable upto 2.5Sqmm.
- No. of Position 20, 40 & 60 Pin FRC male
- Max. Operating Voltage 25VAC/ 30VDC
- Max. permissible current 1A per branch
- Mounting Din Rail

## PRODUCT SELECTION GUIDE

### RELAY INTERFACE MODULE

| Model No.       | Description                       | No. of channels | Input signal | Fuse & Fuse Size (A) | Relay Isolation | Relay Contact VDC |
|-----------------|-----------------------------------|-----------------|--------------|----------------------|-----------------|-------------------|
| DTRM-012D1-PP   | 12VDC CoIL, 01 Ch, 1 C/O          | 01              | 12VDC        |                      | ✓               | 1C                |
| DTRM-021D1-PP   | 12VDC CoIL, 02 Ch, 1 C/O          | 02              | 12VDC        |                      | ✓               | 1C                |
| DTRM-041D1-PP   | 12VDC CoIL, 04 Ch, 1 C/O          | 04              | 12VDC        |                      | ✓               | 1C                |
| DTRM-081D1-PP   | 12VDC CoIL, 08 Ch, 1 C/O          | 08              | 12VDC        |                      | ✓               | 1C                |
| DTRM-161D1-PP   | 12VDC CoIL, 16 Ch, 1 C/O          | 16              | 12VDC        |                      | ✓               | 1C                |
| DTRM-321D1-PP   | 12VDC CoIL, 32 Ch, 1 C/O          | 32              | 12VDC        |                      | ✓               | 1C                |
| DTRM-012D2-PP   | 12VDC CoIL, 01 Ch, 2 C/O          | 01              | 12VDC        |                      | ✓               | 2C                |
| DTRM-021D2-PP   | 12VDC CoIL, 02 Ch, 2 C/O          | 02              | 12VDC        |                      | ✓               | 2C                |
| DTRM-041D2-PP   | 12VDC CoIL, 04 Ch, 2 C/O          | 04              | 12VDC        |                      | ✓               | 2C                |
| DTRM-081D2-PP   | 12VDC CoIL, 08 Ch, 2 C/O          | 08              | 12VDC        |                      | ✓               | 2C                |
| DTRM-161D2-PP   | 12VDC CoIL, 16 Ch, 2 C/O          | 16              | 12VDC        |                      | ✓               | 2C                |
| DTRM-0124D1-PP  | 24VDC CoIL, 01 Ch, 1 C/O          | 01              | 24VDC        |                      | ✓               | 1C                |
| DTRM-0224D1-PP  | 24VDC CoIL, 02 Ch, 1 C/O          | 02              | 24VDC        |                      | ✓               | 1C                |
| DTRM-0424D1-PP  | 24VDC CoIL, 04 Ch, 1 C/O          | 04              | 24VDC        |                      | ✓               | 1C                |
| DTRM-0824D1-PP  | 24VDC CoIL, 08 Ch, 1 C/O          | 08              | 24VDC        |                      | ✓               | 1C                |
| DTRM-1624D1-PP  | 24VDC CoIL, 16 Ch, 1 C/O          | 16              | 24VDC        |                      | ✓               | 1C                |
| DTRM-3224D1-PP  | 24VDC CoIL, 32 Ch, 1 C/O          | 32              | 24VDC        |                      | ✓               | 1C                |
| DTRM-0124D2-PP  | 24VDC CoIL, 01 Ch, 2 C/O          | 01              | 24VDC        |                      | ✓               | 2C                |
| DTRM-0224D2-PP  | 24VDC CoIL, 02 Ch, 2 C/O          | 02              | 24VDC        |                      | ✓               | 2C                |
| DTRM-0424D2-PP  | 24VDC CoIL, 04 Ch, 2 C/O          | 04              | 24VDC        |                      | ✓               | 2C                |
| DTRM-0824D2-PP  | 24VDC CoIL, 08 Ch, 2 C/O          | 08              | 24VDC        |                      | ✓               | 2C                |
| DTRM-1624D2-PP  | 24VDC CoIL, 16 Ch, 2 C/O          | 16              | 24VDC        |                      | ✓               | 2C                |
| DTRM-0824D1F-PP | 24VDC CoIL, 08 Ch, 1 C/O with FFI | 08              | 24VDC        | ✓                    | ✓               | 1C                |
| DTRM-1624D1F-PP | 24VDC CoIL, 16 Ch, 1 C/O with FFI | 16              | 24VDC        | ✓                    | ✓               | 1C                |
| DTRM-0824D2F-PP | 24VDC CoIL, 08 Ch, 2 C/O with FFI | 08              | 24VDC        | ✓                    | ✓               | 2C                |
| DTRM-1624D2F-PP | 24VDC CoIL, 16 Ch, 2 C/O with FFI | 16              | 24VDC        | ✓                    | ✓               | 2C                |
| DTRM-0810A1     | 110VAC CoIL, 08 Ch, 1 C/O         | 08              | 110VAC       |                      | ✓               | 1C                |
| DTRM-0810A2     | 110VAC CoIL, 08 Ch, 2 C/O         | 08              | 110VAC       |                      | ✓               | 2C                |
| DTRM-08230A1    | 230VAC CoIL, 08 Ch, 1 C/O         | 08              | 230VAC       |                      | ✓               | 1C                |
| DTRM-08230A2    | 230VAC CoIL, 08 Ch, 2 C/O         | 08              | 230VAC       |                      | ✓               | 2C                |

## PRODUCT SELECTION GUIDE

### PASSIVE INTERFACE MODULE

| Model No.     | Description                          | No. of connections | Rated cable potential (24VDC or 10/100 VAC) | Fixed Wiring | Flame & Flame Ret. LED | Insulation | Body Contact Configuration | Connector Type on system side (D-SUB, FRC, ELCO) | Orientation of connector (RHS/LHS) |
|---------------|--------------------------------------|--------------------|---------------------------------------------|--------------|------------------------|------------|----------------------------|--------------------------------------------------|------------------------------------|
| PIM2-D25SUB-M | 25 Pin D-Sub male to Screw Terminals | 25                 | 24VDC                                       |              |                        |            |                            | D-SUB                                            | RHS                                |
| PIM2-D37SUB-M | 37 Pin D-Sub male to Screw Terminals | 37                 | 24VDC                                       |              |                        |            |                            | D-SUB                                            | RHS                                |
| PIM2-FLK40-M  | 40 Pin FRC male to Screw Terminals   | 40                 | 24VDC                                       |              |                        |            |                            | FRC                                              | RHS                                |
| PIM2-FLK50-M  | 50 Pin FRC male to Screw Terminals   | 50                 | 24VDC                                       |              |                        |            |                            | FRC                                              | RHS                                |
| DTL38-38M-R   | 38 Pin Male to Screw Terminals- RHS  | 38                 | 24VDC                                       |              |                        |            |                            | ELCO                                             | RHS                                |
| DTL38-38M-L   | 38 Pin Male to Screw Terminals- LHS  | 38                 | 24VDC                                       |              |                        |            |                            | ELCO                                             | LHS                                |
| DTL56-56M-R   | 56 Pin Male to Screw Terminals- RHS  | 56                 | 24VDC                                       |              |                        |            |                            | ELCO                                             | RHS                                |
| DTL56-56M-L   | 56 Pin Male to Screw Terminals- LHS  | 56                 | 24VDC                                       |              |                        |            |                            | ELCO                                             | LHS                                |

# ELECTRONICS INTERFACE MODULE (Discrete Input)



## Discrete Input Fuse Interface Unit With Fuse Protection & LED Indication

- Channel Density Supports 16, 32 channel modular architectures
- Field Input 24 VDC 2-wire Interrogation Inputs
- Individual 100 mA fused field channels
- Field wiring via robust screw terminals upto 2.58q.mm
- System termination using D-Sub connector for quick & error free integration
- Designed for standard DIN-rail installation



## Discrete Input Relay Interface Unit With 1 C/O Relay - Compact

- Available in 16, 32 channel modular architectures
- Field Input 24 VDC 2-wire Interrogation to energise Relay
- System Input through Relay contact
- Field wiring via robust screw terminals upto 2.58q.mm
- System termination using D-Sub connector for quick & error free integration
- Designed for standard DIN-rail installation



## Discrete Input Relay Interface Unit With 1 C/O Relay - Standard

- Available in 16, 32 channel modular architectures
- Field Input 24 VDC 2-wire Interrogation to energise Relay
- System Input through Relay contact
- Field wiring via robust screw terminals upto 2.58q.mm
- System termination using D-Sub connector for quick & error free integration
- Designed for standard DIN-rail installation



## Discrete Input Redundant Fuse Interface Unit with Fuse Protection & LED Indication

- Channel Density Supports 16, 32 channel modular architectures
- Field Input 24 VDC 2-wire Interrogation Inputs
- Individual 100 mA fused field channels
- Field wiring via robust screw terminals upto 2.58q.mm
- System termination using D-Sub connector for quick & error free integration
- Designed for standard DIN-rail installation



## Discrete Input Red. Relay Interface Unit With 1 C/O Relay - Compact

- Available in 16, 32 channel modular architectures
- Field Input 24 VDC 2-wire Interrogation to energise Relay
- System Input through Relay contact
- Field wiring via robust screw terminals upto 2.58q.mm
- System termination using D-Sub connector for quick & error free integration
- Designed for standard DIN-rail installation



## Discrete Input Red. Relay Interface Unit With 1 C/O Relay - Standard

- Available in 16, 32 channel modular architectures
- Field Input 24 VDC 2-wire Interrogation to energise Relay
- System Input through Relay contact
- Field wiring via robust screw terminals upto 2.58q.mm
- System termination using D-Sub connector for quick & error free integration
- Designed for standard DIN-rail installation

# ELECTRONICS INTERFACE MODULE (Discrete Output)



**Discrete Output Relay Interface Unit 24VDC, 1 C/O Contact Pot free**

- Channel Density 8, 16, 32\* (Non-redundant)
- Discrete Output/ Relay Coil Voltage 24VDC
- Accept Digital Output Source type signal.
- Relay Contact 1 C/O Potential free ensuring galvanic isolation between field & system
- Fuse Protection 5 Amp on each contact or user to specify.
- Field termination via Screw Terminal, System termination through D-Sub Connector.
- Designed for standard DIN-rail installation



**Discrete Output Relay Interface Unit 24VDC, 2 C/O Contact Pot free**

- Channel Density 8, 16 (Non-redundant)
- Discrete Output/ Relay Coil Voltage 24VDC
- Accept Source Type Digital Output signal.
- Relay Contact 2 C/O Potential free ensuring galvanic isolation between field & system.
- Fuse Protection 5 Amp in each contact or user to specify.
- Field termination via Screw Terminal, System termination Connector through D-Sub
- Designed for standard DIN-rail installation



**Discrete Output Relay Interface Unit 24VDC, 2 C/O Relay (1 Pot free, 1 Wetted)**

- Channel Density 8, 16 (Non-Redundant)
- Discrete Output/ Relay Coil Voltage 24VDC
- Accept Source Type Digital Output signal.
- Relay Contact 2 C/O (1 Pot free & 1 Wetted)
- Fuse Protection 5 Amp in each contact or user to specify.
- Field termination via Screw Terminal, System termination Connector through D-Sub
- Designed for standard DIN-rail installation



**Discrete Output Relay Interface Unit 24VDC, 1 C/O Contact (Redundant)**

- Channel Density 8, 16, 32\* (Non-redundant)
- Discrete Output/ Relay Coil Voltage 24VDC
- Accept Digital Output Source type signal.
- Relay Contact 1 C/O Potential free ensuring galvanic isolation between field & system
- Fuse Protection 5 Amp on each contact or user to specify.
- Field termination via Screw Terminal, System termination through D-Sub Connector.
- Designed for standard DIN-rail installation



**Discrete Output Relay Interface Unit 24VDC, 2 C/O Contact (Redundant)**

- Channel Density 8, 16 (Non-redundant)
- Discrete Output/ Relay Coil Voltage 24VDC
- Accept Source Type Digital Output signal.
- Relay Contact 2 C/O Potential free ensuring galvanic isolation between field & system.
- Fuse Protection 5 Amp in each contact or user to specify.
- Field termination via Screw Terminal, System termination through D-Sub Connector
- Designed for standard DIN-rail installation



**Discrete Output Relay Interface Unit 24VDC, 2 C/O Relay (1 Pot free, 1 Wetted) (Redundant)**

- Channel Density 8, 16 (Non-Redundant)
- Discrete Output/ Relay Coil Voltage 24VDC
- Accept Source Type Digital Output signal.
- Relay Contact 2 C/O (1 Pot free & 1 Wetted)
- Fuse Protection 5 Amp in each contact or user to specify.
- Field termination via Screw Terminal, System termination through D-Sub Connector.
- Designed for standard DIN-rail installation

# ELECTRONICS INTERFACE MODULE

(Analog Inputs & Analog Outputs)



**Analog Input Interface Unit**  
With fuse protection for 2/4 wire

- Channel Density 1s (Non-redundant)
- Discrete Output/ Relay Coil Voltage 24VDC
- Accept Digital Output Source type signal.
- Relay Contact 1 C/O Potential free ensuring galvanic isolation between field & system
- Fuse Protection 5 Amp on each contact or user to specify.
- Field termination via Screw Terminal, System termination through D-Sub Connector.
- Designed for standard DIN-rail installation



**Analog Input Interface Unit**  
With channel to channel isolation

- Channel Density 8, 1s (Non-redundant)
- Discrete Output/ Relay Coil Voltage 24VDC
- Accept Source Type Digital Output signal.
- Relay Contact 2 C/O Potential free ensuring galvanic isolation between field & system.
- Fuse Protection 5 Amp. in each contact or user to specify.
- Field termination via Screw Terminal, System termination through D-Sub Connector.



**Analog Input Red. Interface Unit**  
With channel to channel isolation

- Channel Density 8, 1s (Non-Redundant)
- Discrete Output/ Relay Coil Voltage 24VDC
- Accept Source Type Digital Output signal.
- Relay Contact 2 C/O (1 Pot free & 1 Wetted)
- Fuse Protection 5 Amp. in each contact or user to specify.
- Field termination via Screw Terminal, System termination through D-Sub Connector.
- Designed for standard DIN-rail installation



**Analog Output Interface Unit**  
with fuse protection & LED indication

- Channel Density 8, 1s, 32s (Non-redundant)
- Discrete Output/ Relay Coil Voltage 24VDC
- Accept Digital Output Source type signal.
- Relay Contact 1 C/O Potential free ensuring galvanic isolation between field & system
- Fuse Protection 5 Amp on each contact or user to specify.
- Field termination via Screw Terminal, System termination through D-Sub Connector.
- Din Rail Mountable



**Analog Output Interface Unit**  
with channel to channel isolation

- Channel Density 8, 1s (Non-redundant)
- Discrete Output/ Relay Coil Voltage 24VDC
- Accept Source Type Digital Output signal.
- Relay Contact 2 C/O Potential free ensuring galvanic isolation between field & system.
- Fuse Protection 5 Amp. in each contact or user to specify.
- Field termination via Screw Terminal, System termination through D-Sub Connector.
- Din Rail Mountable



**Analog Output Red. Interface Unit**  
With channel to channel isolation

- Channel Density 8, 1s (Non-Redundant)
- Discrete Output/ Relay Coil Voltage 24VDC
- Accept Source Type Digital Output signal.
- Relay Contact 2 C/O (1 Pot free & 1 Wetted)
- Fuse Protection 5 Amp. in each contact or user to specify.
- Field termination via Screw Terminal, System termination through D-Sub Connector.
- Din Rail Mountable

# PRODUCT SELECTION GUIDE

## ELECTRONIC INTERFACE MODULE (Discrete Input & Output)

| Model No.           | Description                                                                        | Signal Type (A/D/C) | Channel no. | Input Voltage (24VDC or 5VDC or 12VDC or VAG) | Field Wiring (W, DIF, P, MOP) | Fuse & Fuse Fail LED | RELAY Isolation | Relay Contact Configuration (C/O) | Channel Type (Source/Sink/DO) | Orientation of connection (RHS/LHS) |
|---------------------|------------------------------------------------------------------------------------|---------------------|-------------|-----------------------------------------------|-------------------------------|----------------------|-----------------|-----------------------------------|-------------------------------|-------------------------------------|
| DTM-DI1634DF        | 16 Channel 24VDC DI Fuse Interface Module (2 Wire)                                 | DI                  |             | 24VDC                                         | 2W                            | ✓                    |                 |                                   | 25P                           | RHS                                 |
| DTM-DI3234DF        | 32 Channel 24VDC DI Fuse Interface Module (2 Wire)                                 | DI                  |             | 24VDC                                         | 2W                            | ✓                    |                 |                                   | 25P                           | RHS                                 |
| DTM-DI1634DIF       | 16 Channel 24VDC DI Relay Interface Module 1 C/O (2 Wire)                          | DI                  |             | 24VDC                                         | 2W                            |                      | ✓               | 1C                                | 25P                           | RHS                                 |
| DTM-DI1634DIF-2W    | 16 Channel 24VDC DI Relay Interface Module 1 C/O (Differential)                    | DI                  |             | 24VDC                                         | DIF                           |                      | ✓               | 1C                                | 37P                           | RHS                                 |
| DTM-DI1634DIFCF     | 16 Channel 24VDC DI Relay Interface Module 1 C/O with FTI (2 Wire)                 | DI                  |             | 24VDC                                         | 2W                            | ✓                    | ✓               | 1C                                | 25P                           | RHS                                 |
| DTM-DI1634DIFCF-2W  | 16 Channel 24VDC DI Relay Interface Module 1 C/O with FTI (Differential)           | DI                  |             | 24VDC                                         | DIF                           | ✓                    | ✓               | 1C                                | 37P                           | RHS                                 |
| DTM-DI1634DIF       | 16 Channel Redundant 24VDC DI Fuse Interface Modules (2 Wire)                      | DI                  |             | 24VDC                                         | 2W                            | ✓                    |                 |                                   | 25P                           | RHS                                 |
| DTM-DI1634DIF-2W    | 16 Channel Redundant 24VDC DI Fuse Interface Modules (2 Wire)                      | DI                  |             | 24VDC                                         | 2W                            | ✓                    |                 |                                   | 25P                           | RHS                                 |
| DTM-DI1634DIFCF     | 16 Channel Redundant 24VDC DI Relay Interface Module 2 C/O (2 Wire)                | DI RED              |             | 24VDC                                         | 2W                            |                      | ✓               | 2C                                | 25P                           | RHS                                 |
| DTM-DI1634DIFCF-2W  | 16 Channel Redundant 24VDC DI Relay Interface Module 2 C/O with FTI (2 Wire)       | DI RED              |             | 24VDC                                         | 2W                            | ✓                    | ✓               | 2C                                | 25P                           | RHS                                 |
| DTM-DO1634DIF       | 16 Channel 24VDC DO Relay Module 1 C/O Pol-Free-Source type                        | DO                  |             | 24VDC                                         | P                             |                      | ✓               | 1C                                | 25P                           | RHS                                 |
| DTM-DO1634DIF-2W    | 16 Channel 24VDC DO Relay Module 2 C/O Pol-Free-Source type                        | DO                  |             | 24VDC                                         | P                             |                      | ✓               | 2C                                | 25P                           | RHS                                 |
| DTM-DO1634DIFCF     | 16 Channel 24VDC DO Relay Module 1 C/O with FTI Pol-Free-Source type               | DO                  |             | 24VDC                                         | P                             | ✓                    | ✓               | 1C                                | 25P                           | RHS                                 |
| DTM-DO1634DIFCF-2W  | 16 Channel 24VDC DO Relay Module 2 C/O with FTI Pol-Free-Source type               | DO                  |             | 24VDC                                         | P                             | ✓                    | ✓               | 2C                                | 25P                           | RHS                                 |
| DTM-DO1634DIFPWF    | 16 Channel 24VDC DO Relay Module 2 C/O with Watchdog & 1 Pol-Free-Source type      | DO                  |             | 24VDC                                         | 1W3P                          | ✓                    | ✓               | 2C                                | 25P                           | RHS                                 |
| DTM-DOR1634DIF      | 16 Channel 24VDC DO Red. Relay Module 1 C/O Pol-Free-Source type                   | DO RED              |             | 24VDC                                         | P                             |                      | ✓               | 1C                                | 25P                           | RHS                                 |
| DTM-DOR1634DIF-2W   | 16 Channel 24VDC DO Red. Relay Module 2 C/O Pol-Free-Source type                   | DO RED              |             | 24VDC                                         | P                             |                      | ✓               | 2C                                | 25P                           | RHS                                 |
| DTM-DOR1634DIFCF    | 16 Channel 24VDC DO Red. Relay Module 1 C/O with FTI Pol-Free-Source type          | DO RED              |             | 24VDC                                         | P                             | ✓                    | ✓               | 1C                                | 25P                           | RHS                                 |
| DTM-DOR1634DIFCF-2W | 16 Channel 24VDC DO Red. Relay Module 2 C/O with FTI Pol-Free-Source type          | DO RED              |             | 24VDC                                         | P                             | ✓                    | ✓               | 2C                                | 25P                           | RHS                                 |
| DTM-DOR1634DIFPWF   | 16 Channel 24VDC DO Red. Relay Module 2 C/O with Watchdog & 1 Pol-Free-Source type | DO RED              |             | 24VDC                                         | 1W3P                          | ✓                    | ✓               | 2C                                | 25P                           | RHS                                 |
| DTM-DO1634DIF-2W    | 16 Channel 24VDC DO Relay Module 1 C/O Pol-Free-Differential                       | DO                  |             | 24VDC                                         | P                             |                      | ✓               | 1C                                | 37P                           | RHS                                 |
| DTM-DO1634DIF-2W    | 16 Channel 24VDC DO Relay Module 2 C/O Pol-Free-Differential                       | DO                  |             | 24VDC                                         | P                             |                      | ✓               | 2C                                | 37P                           | RHS                                 |
| DTM-DO1634DIFCF-2W  | 16 Channel 24VDC DO Relay Module 1 C/O with FTI Pol-Free-Differential              | DO                  |             | 24VDC                                         | P                             | ✓                    | ✓               | 1C                                | 37P                           | RHS                                 |
| DTM-DO1634DIFCF-2W  | 16 Channel 24VDC DO Relay Module 2 C/O with FTI Pol-Free-Differential              | DO                  |             | 24VDC                                         | P                             | ✓                    | ✓               | 2C                                | 37P                           | RHS                                 |
| DTSM-DO1634DIF      | 16 Channel 24VDC Slim DO Relay Module 1 C/O Pol-Free-Source type                   | DO                  |             | 24VDC                                         | P                             |                      | ✓               | 1C                                | 25P                           | RHS                                 |
| DTSM-DO1634DIFCF    | 16 Channel 24VDC Slim DO Relay Module 1 C/O with FTI Pol-Free-Source type          | DO                  |             | 24VDC                                         | P                             | ✓                    | ✓               | 1C                                | 25P                           | RHS                                 |
| DTSM-DO1634DIF-2W   | 16 Channel 24VDC Slim DO Relay Module 1 C/O Pol-Free-Differential                  | DO                  |             | 24VDC                                         | P                             |                      | ✓               | 1C                                | 37P                           | RHS                                 |
| DTSM-DO1634DIFCF-2W | 16 Channel 24VDC Slim DO Relay Module 1 C/O with FTI Pol-Free-Differential         | DO                  |             | 24VDC                                         | P                             | ✓                    | ✓               | 1C                                | 37P                           | RHS                                 |
| DTSM-DO3234DIF      | 32 Channel 24VDC Slim DO Relay Module 1 C/O Pol-Free-Source type                   | DO                  |             | 24VDC                                         | P                             |                      | ✓               | 1C                                | 37P                           | RHS                                 |

## PRODUCT SELECTION GUIDE

### ELECTRONIC INTERFACE MODULE (Analog Input& Output)

| Model No.         | Description                                                             | Signal Type (AI/AO) | Channel no. | Field Wiring (2W/4W) | Fuse & Fuse Full LED | Isolation | Connector Type on system side (D-Sub 25, 37) | Orientation of connector (Pin/ LHS) |
|-------------------|-------------------------------------------------------------------------|---------------------|-------------|----------------------|----------------------|-----------|----------------------------------------------|-------------------------------------|
| DTEM-AI08F-2W4W   | 08 Channel AI Fuse Interface Modules for 2 Wire or 4 Wire field signals | AI                  | 8           | 2W/4W                | ✓                    |           | 25P                                          | RHS                                 |
| DTEM-AI16F-2W4W   | 16 Channel AI Fuse Interface Modules for 2 Wire or 4 Wire field signals | AI                  | 16          | 2W/4W                | ✓                    |           | 37P                                          | RHS                                 |
| DTEM-AI16F-4W     | 16 Channel AI Fuse Interface Modules for 4 Wire field signals           | AI                  | 16          | 4W                   | ✓                    |           | 37P                                          | RHS                                 |
| DTEM-AI08ISO-2W4W | 08 Channel AI Isolation Modules for 2 Wire or 4 Wire field signals      | AI                  | 8           | 2W/4W                |                      | ✓         | 25P                                          | RHS                                 |
| DTEM-AI08ISO-2W4W | 08 Channel AI Red Isolation Modules for 2 Wire or 4 Wire field signals  | AI                  | 8           | 2W/4W                |                      | ✓         | 25P                                          | RHS                                 |
| DTEM-AO08F        | 08 Channel AO Fuse Interface Modules for 2 Wire or 4 Wire field signals | AO                  | 8           | 2W/4W                | ✓                    |           | 25P                                          | RHS                                 |
| DTEM-AO08ISO-2W4W | 08 Channel AO Isolation Modules for 2 Wire or 4 Wire field signals      | AO                  | 8           | 2W/4W                |                      | ✓         | 25P                                          | RHS                                 |
| DTEM-AO08ISO-2W4W | 08 Channel AO Red Isolation Modules for 2 Wire or 4 Wire field signals  | AO                  | 8           | 2W/4W                |                      | ✓         | 25P                                          | RHS                                 |

# PRE-ENGINEERED CABLE ASSEMBLY

## KEY FEATURES

- Compatible with multiple connector options: PRO / D-Sub / ELCO
- Manufactured in user-specified cable lengths to suit installation requirements
- High-quality outer sheath options available in FRLS and LSZH for enhanced safety and compliance
- Available cable cross-sections: 0.25 sq.mm / 0.34 sq.mm / 0.5 sq.mm
- Factory-terminated and tested to ensure consistent performance and reduced installation time

## TECHNICAL ADVANTAGES

- Ensures reliable signal transmission with minimal losses
- Improves system reliability by eliminating on-site wiring errors
- Suitable for control, signal, and low-power applications
- Robust construction for long service life in industrial environments

## APPLICATIONS

- PLC and control panel wiring
- I/O module interconnections
- Relay and interface modules
- Industrial automation and instrumentation systems

## CUSTOMIZATION OPTIONS

- Connector type and pin configuration as per customer requirement
- Cable length and labeling as specified
- Optional shielding and special jacket materials on request
- End-to-end continuity and insulation testing before dispatch



## FAN MONITORING & CONTROLLERS



### Fan Monitoring & Controller for 2 Fans

- Built in high precision Temperature Sensor for displaying the ambient temperature inside the cabinet
- Wide Input Power Supply Range 90-270VAC
- Common Alarm Relay Contact for Fan failure
- Alarm Relay Contact for Temperature set point exceedance
- Built-in Auto-Current Sensing feature.
- 4-20 mA retransmission analog output



### Fan Monitoring & Controller for 4 Fans

- Built in high precision Temperature Sensor for displaying the ambient temperature inside the cabinet
- Wide Input Power Supply Range 90-270VAC
- Common Alarm Relay Contact for Fan failure
- Alarm Relay Contact for Temperature set point exceedance
- Built-in Auto-Current Sensing feature.
- 4-20 mA retransmission analog output
- DIN-rail mountable design



### Fan Monitoring & Controller for 2 Fan with Input Power Supply Redundancy

- Built in high precision Temperature Sensor for displaying the ambient temperature inside the cabinet
- Redundant Input Power Supply
- Common Alarm Relay Contact for Fan failure
- Alarm Relay Contact for Temperature set point exceedance
- Built-in Auto-Current Sensing feature.
- 4-20 mA retransmission analog output
- DIN-rail mountable design

## TEMPERATURE INDICATORS



### Temperature Indicators with 4-20mA Re-transmission & 1 contact DTM-80

- Built in high precision Temperature Sensor for displaying the ambient temperature inside the cabinet
- Digital Display for Temperature Indication
- Single Alarm Relay Contact for Temperature set point exceedance
- 4-20 mA retransmission analog output
- DIN-rail mountable design



### Temperature Indicators with 4-20mA Re-transmission & 2 Relay contact DTM-82

- Built in high precision Temperature Sensor for displaying the ambient temperature inside the cabinet
- Digital Display for Temperature Indication
- Dual Alarm Relay Contact for 2 Temperature set points
- 4-20 mA retransmission analog output
- DIN-rail mountable design



### Temperature Indicators with 1 Relay contact (DTM-70)

- Built in high precision Temperature Sensor for displaying the ambient temperature inside the cabinet
- Redundant Input Power Supply
- Common Alarm Relay Contact for Fan failure
- Alarm Relay Contact for Temperature set point exceedance
- Built-in Auto-Current Sensing feature.
- DIN-rail mountable design

## TEMPERATURE & HUMIDITY INDICATORS



**Relative Humidity & Temp Contr. + RH Probe DTRHT-104**

- Humidity and Temperature Indication
- Relay Control and Retransmission for RH and Temp
- Extended Probe for RH and Temp
- Up to four control relay outputs



**RH+T Indicator Transmitter DTRHT-122**

- Bright OLED Display for both parameters
- Data communication on Modbus RTU
- Built-in precision RH+T Sensor
- Two 4 to 20 mA retransmission signals for RH and Temperature



**Compact RH + Temp Indicator DTRHT-120**

- Bright OLED alphanumeric Display
- AC power supply operation with power adaptor
- Built-in precision RH and Temperature Sensors
- Dual Temperature Sensor option with extendable cable

## PANEL UTILITIES COMPONENTS



**Thermostat**

- Available configurations:
- Normally Open (NO)
- Normally Closed (NC)
- Dual Thermostat (NO + NC)
- Used for temperature control in electrical panels and enclosures
- Helps prevent condensation, overheating, and component failure
- Adjustable temperature setting with clear scale indication
- DIN-rail mounting with compact form factor



**Industrial Sockets  
DIN mount**

- Country-specific and universal socket options available
- Supported socket types include:
- Universal Socket - AC30
- Type-F (Schuko)
- Type-G
- Other international standards on request
- DIN-rail mountable design for easy panel installation
- Robust construction for industrial environments
- Suitable for powering service tools, laptops, and maintenance equipment inside panels



**Panel LED Lights**

- Power range: 3 Watt to 15 Watt
- Provides uniform illumination inside control panels
- Low power consumption with high luminous efficiency
- Long service life and maintenance-free operation
- Easy installation with DIN-rail or screw mounting options

## AC STATIC SWITCH (ATS)



**Static Power Switch -  
21 Ampere DT-ATS-21A**

- Up to 21 Ampere load current rating
- Ultrahigh speed Opto-Thyristor switching of inputs
- Digital Display for Input Voltages and Output
- Current monitoring
- 110 VAC / 230 VAC Single Phase Power Supply inputs



**Static Power Switch -  
31 Ampere DT-ATS-31A**

- Up to 31 Ampere load current rating
- 110 VAC / 230 VAC Single Phase Power Supply inputs
- Ultrahigh speed Opto-Thyristor switching
- One Control Relay output for remote power fail alarm



**Static Power Switch -  
41 Ampere DT-ATS-41A**

- Up to 41 Ampere load current rating
- Control Relay output for remote power fail alarm
- Ultrahigh speed Opto-Thyristor switching
- Automatic recovery after power failure resumption



**Static Power Switch -  
51 Ampere DT-ATS-51A**

- 110 VAC / 230 VAC Single Phase Power Supply inputs
- Relay change over contacts on Input switching
- Up to 51 Ampere load current rating
- Automatic recovery after power failure resumption



**Static Power Switch -  
61 Ampere DT-ATS-61A**

- Up to 61 Ampere maximum load rating
- Ultra high speed Opto-Thyristor switching
- 110 VAC / 230 VAC Single Phase Power Supply inputs
- Control Relay output for remote power fail alarm



**Static Power Switch 21 & 31  
Ampere DT-ATS-21A-D and  
31A-D**

- Up to 21 Ampere and 31 Ampere load current rating
- Industrial grade DIN Rails mounting ABS enclosure
- Digital Display for Input Voltages and Output
- Current monitoring
- 110 VAC / 230 VAC Single Phase Power Supply

## MODBUS CONVERTERS



**Modbus Converters  
DTMOD-48**

- 8-Analog input signals and 8-Digital input signals
- Modbus RTU or Modbus TCP/IP protocol Output
- Isolation level of 1500 V AC for Digital inputs
- Compact DIN Rail mount execution



**Modbus RTU Interface  
Module DTMOD-7332**

- 7-Analog input signals and 3-Digital input signals
- 3 Analog output signals
- Two control relay outputs
- Modbus RTU or Modbus TCP/IP protocol Output



**Modbus Interface  
Modules DTMOD-310**

- 4-Analog input signals
- Modbus RTU or Modbus TCP/IP protocol Output
- Universal AC Power Supply
- Compact DIN Rail mount execution

## STATIC GROUNDING RELAYS



**Resistance based FLP  
Earthing Relay DT-SGR-  
250-SX**

- Microcontroller based Intrinsically Safe Exi certified design
- Vehicle Recognition system
- PESO certified Exd Explosionproof enclosure
- Safety Relay interlock for loading/unloading operations



**Res. + Cap. based FLP  
Earthing Relay DT-SGR-820-X**

- Microcontroller based Intelligent Vehicle recognition system
- Intrinsically safe Exi certified design
- PESO certified Exd Flameproof enclosure
- Data communication on RS485 Modbus RTU



**Resistance based Earthing  
Relay Module DT-SGR-250-M**

- Microcontroller based intrinsically safe Exi certified design
- Vehicle Recognition system
- Two or five relay changeover contacts option
- Alarm indication on front panel

# CUSTOMISED PRE-ENGINEERED CABLE ASSEMBLIES & FTAS FOR

HONEYWELL C300/ML200/PLANT CRUISE/HC900/SAFETY MANAGER



## Minimised wiring effort

Pluggable connectors and cables minimise the on site wiring effort.



## Excellent flexibility

The pre-assembled cables can be manufactured with different cross sections and in different lengths of up to 50 m.



## Wide range of interface (FTA)

D&T interfaces offer a large variety of functions such as LED indicators, insulators, relays or fuses for all the I/O cards.

Plug & Play interface solutions includes below features

### Digital/Analog I/O

Digital & Analog Input Output FTA as well as Electronics interface signals

### Modular FTAs

Various type of FTA/EIM available with the options of Screw/tension clamp terminals, LED indicators, Slim Relay, Fuse protection DIN-rail housing for HC900, C300, ML200, PLANT CRUISE

### Customised Cable solutions

for Honeywell Safety Manager system



### Key Benefits

#### Customized Cable Lengths

Tailored to specific application need

#### Shielded Assemblies

Premade, shielded, and labeled for signal integrity

#### Fast Installation

Plug-ready assemblies minimize wiring and setup time

#### Tested & Labeled

Function-tested with clear tagging and documentation

# SELECTION GUIDE FOR PRE-ASSEMBLED CABLES & FTA FOR

HONEYWELL C300 IOTA'S/PLANT CRUISE

| Honeywell IOTA        |                                                                            | Pre-assembled cables         |              | FTA (D & T Interfaces) |                                                                                                                                                                                                                                                                                                   |              |
|-----------------------|----------------------------------------------------------------------------|------------------------------|--------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Channel no            | Card No                                                                    | Cable Type                   | Units / IOTA | Channel No             | Part No                                                                                                                                                                                                                                                                                           | Units / IOTA |
| 32 DI                 | CC-TDIL01<br>CC-TDIL11<br>CC-TDIL51<br>CC-TDIL61<br>8C-TDILA1<br>8C-TDILB1 | DTCBL-C300-CS2B-UNI-D37F-XX  | 2            | 16                     | DTFTA-C300-16UNI-72-XOR<br>DTFTA-C300-16UNI-72-XOL<br>DTFTA-C300-16UNI-42-XOR<br>DTFTA-C300-16UNI-42-XOL<br>DTFTA-C300-16UNI-C32-XOR<br>DTFTA-C300-16UNI-C32-XOL<br>DTEM-DO1624D1C-2W<br>DTEM-DO1624D1CF-2W                                                                                       | 2            |
| 32 DO                 | CC-TDOB01<br>CC-TDOB11<br>CC-TDOD51<br>CC-TDOD61                           | DTCBL-C300-CS2B-UNI-DS7F-01  | 2            | 16                     | DTFTA-C300-16UNI-72-XOR<br>DTFTA-C300-16UNI-72-XOL<br>DTFTA-C300-16UNI-42-XOR<br>DTFTA-C300-16UNI-42-XOL<br>DTFTA-C300-16UNI-C32-XOR<br>DTFTA-C300-16UNI-C32-XOL<br>DTEM-DO1624D1C-2W<br>DTEM-DO1624D2C-2W<br>DTEM-DO1624D1CF-2W<br>DTEM-DO1624D2CF-2W<br>DTSM-DO1624D1C-2W<br>DTSM-DO1624D1CF-2W | 2            |
| 16 AI                 | CC-TAIX01<br>CC-TAIX11<br>CC-TAIX51<br>CC-TAIX61                           | DTCBL-C300-C36B-AISE-D37F-01 | 1            | 16                     | DTFTA-C300-16AIS-72-XOR<br>DTFTA-C300-16AIS-72-XOL<br>DTFTA-C300-16UNI-42-XOR<br>DTFTA-C300-16UNI-42-XOL<br>DTFTA-C300-16AIS-C36-XOR<br>DTFTA-C300-16AIS-C36-XOL                                                                                                                                  | 1            |
| 16 AI<br>DIFFERENTIAL | CC-TAID01<br>CC-TAID11                                                     | DTCBL-C300-C48B-AIDF-D48F-01 | 1            | 16                     | DTFTA-C300-16AID-42-XOR<br>DTFTA-C300-16AID-42-XOL<br>DTFTA-C300-16AID-72-XOL<br>DTFTA-C300-16AID-72-XOR<br>DTFTA-C300-16AID-C48-XOR<br>DTFTA-C300-16AID-C48-XOL                                                                                                                                  | 1            |
| 16 AO                 | CC-TAOX51<br>CC-TAOX01<br>CC-TAOX11<br>CC-TAON01<br>CC-TAON11<br>CC-TAOX61 | DTCBL-C300-CS2B-UNI-DS7F-01  | 1            | 16                     | DTFTA-C300-16UNI-72-XOR<br>DTFTA-C300-16UNI-72-XOL<br>DTFTA-C300-16UNI-42-XOR<br>DTFTA-C300-16UNI-42-XOL<br>DTFTA-C300-16UNI-C32-XOR<br>DTFTA-C300-16UNI-C32-XOL                                                                                                                                  | 1            |

## NOTE:

1. DI & DO FTA's are available with fuse protection, LED indicator per channel or Relay Isolation
2. XX indicates the length of Cable in Mtr. User to specify.

# SELECTION GUIDE FOR PRE-ASSEMBLED CABLES & EIM FOR

HONEYWELL ML200/HC900

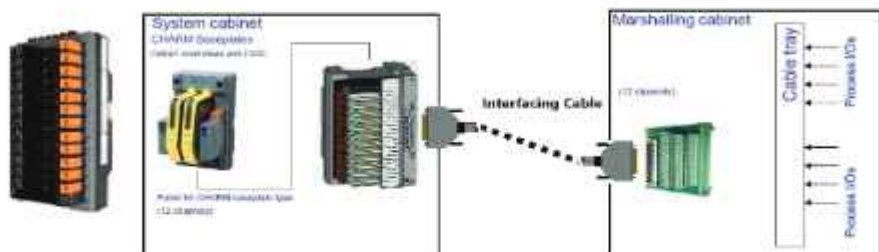
| Honeywell<br>ML200/HC900 |                                             | Pre-assembled cables                                                                                                    |                 | EIM (D & T Interfaces) |                                                                                                                             |                         |
|--------------------------|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Channel<br>no            | Card No                                     | Cable Type                                                                                                              | Units /<br>IOTA | Channel<br>No          | Part No                                                                                                                     | Units /<br>IOTA         |
| 16 DI<br>Source/<br>Sink | ML200:<br>MLI-D22A<br><br>HC900:<br>900G02  | ML200:<br>DTCSL-MLD22A-FAO-DI-D25F-XX<br><br>HC900:<br>DTCSL-HC9002-FAO-DI-D25F-01                                      | 1               | 16                     | OTEM-DI16240F<br>OTEM-DI162401C<br>OTEM-DI162401CF<br>OTEM-DIR16240F<br>OTEM-DIR162401CF                                    | 1                       |
| 32 DI<br>Source/<br>Sink | ML200:<br>MLI-D24A<br><br>HC900:<br>900G32  | ML200:<br>DTCSL-MLD24A-FCN40-DI-D25F-01<br><br>HC900:<br>DTCSL-HC9032-FAO-DI-D25F-01-X<br>DTCSL-HC9032-FAO-DI-D25F-01-Y | 2               | 16/32                  | OTEM-DI16240F<br>OTEM-DI162401C<br>OTEM-DI162401CF<br>OTEM-DIR16240F<br>OTEM-DIR162401CF<br>OTEM-DI32240F<br>OTEM-DIR32240F | 2/1<br>16CH-2<br>32CH-1 |
| 16 DO<br>Source<br>Type  | ML200:<br>MLQ-TR2B<br><br>HC900:<br>900H02  | ML200:<br>DTCSL-MLTR2B-FAO-DI-D25F-01<br><br>HC900:<br>DTCSL-HC9H02-FAO-DI-D25F-01                                      | 1               | 16                     | OTEM-DO162401C<br>OTEM-DO162402C<br>OTEM-DO162401CF<br>OTEM-DO162402CF<br>OTEM-DO162401P1WF<br>OTEM-DO162401C               | 1                       |
| 32 DO<br>Source<br>Type  | ML200:<br>MLQ-TR4B<br><br>HC900:<br>900H32  | ML200:<br>DTCSL-MLTR4B-FCN40-DO-D25F-01<br><br>HC900:<br>DTCSL-HC9H32-FAO-DO-D25F-XX-X<br>DTCSL-HC9H32-FAO-DO-D25F-XX-Y | 2               | 16                     | OTEM-DO162401C<br>OTEM-DO162402C<br>OTEM-DO162401CF<br>OTEM-DO162402CF<br>OTEM-DO162401P1WF<br>OTEM-DO162401C               | 2                       |
| 8 AI                     | ML200:<br>MLF-AC8A<br><br>HC900:<br>900A01  | ML200:<br>DTCSL-MLAC8A-FAO-AI-D25F-01<br><br>HC900:<br>DTCSL-HC8A01-FAO-AI-D25F-01                                      | 1               | 8                      | OTEM-AI08F-2W4W<br>OTEM-AI08ISO-2W4W<br>OTEM-AI08ISO-2W4W                                                                   | 1                       |
| 16 AI                    | ML200:<br>MLF-AD16A<br><br>HC900:<br>900A16 | ML200:<br>DTCSL-MLAD16A-FAO-AI-D37F-01<br><br>HC900:<br>DTCSL-HC8A16-FAO-AI-D37F-01                                     | 1               | 8/16                   | OTEM-AI08F-2W4W<br>OTEM-AI08ISO-2W4W<br>OTEM-AI08ISO-2W4W<br>OTEM-AI16F-4W                                                  | 2/1<br>8CH-2<br>16CH-1  |
| 8 AO                     | ML200:<br>MLF-DC8A<br><br>HC900:<br>900B08  | ML200:<br>DTCSL-MLDC8A-FAO-AO-D25F-01<br><br>HC900:<br>DTCSL-HC9B08-FAO-AO-D25F-01                                      | 1               | 8                      | OTEM-AO08F<br>OTEM-AO08ISO-2W4W<br>OTEM-AO08ISO-2W4W                                                                        | 1                       |

## NOTE:

1. DI/DO Electronic Interface modules are available with fuse protection, LED Indicator per channel or Relay Isolation for Non Redundant as well as Redundant solution.
2. Per one Redundant module no of prefab cable count get double for Ex. If you select 16 channel redundant module then you will get two nos of 16 channel Prefab cable to achieve the redundancy. (In part no R stands for Redundancy: DIR/DOR/AIR/AOR)
3. XX indicates the length of Cable in Mtr. User to specify.

# CUSTOMISED PRE-ENGINEERED CABLE ASSEMBLIES & FTAs FOR

EMERSON DELTAV/ OVATION/ CHARMS BASE



## Minimised wiring effort

Pluggable connectors and cables minimise the on site wiring effort.



## Excellent flexibility

The pre-assembled cables can be manufactured with different cross sections and in different lengths of up to 50 m.



## Interface Solution for Charms Base plate

D&T interfaces offer plug & play Adapter as well as FTA solution for charms base plate for all I/O signals.

## Plug & Play interface solutions Includes below features

### Digital/Analog I/O

Digital & Analog Input Output FTA as well as charms Adapter solution for all I/O signals

### Modular FTAs

Various type of FTA/EIM available with the options of Screw/ tension clamp terminals, LED indicators, Slim Relay, Fuse protection DIN-rail housing for DELTA V as well as Ovation

### Customised Cable solutions

Available on request.

## Key Benefits

### Customized Cable Lengths

Tailored to specific application need

### Fast Installation

Plugready assemblies minimize wiring and setup time

### Shielded Assemblies

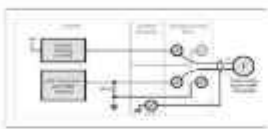
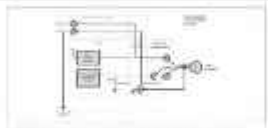
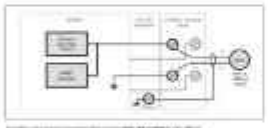
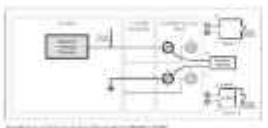
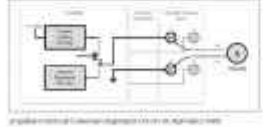
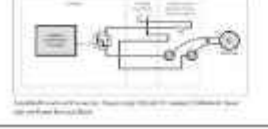
Premade, shielded, and labeled for signal integrity

### Tested & Labeled

Function tested with clear tagging and documentation

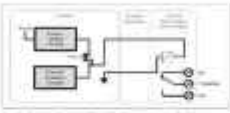
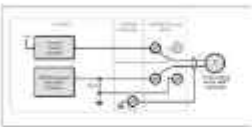
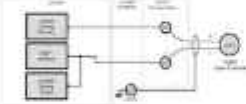
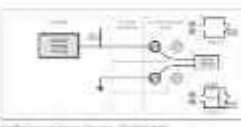
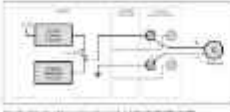
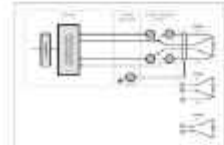
# SELECTION GUIDE FOR PRE-ASSEMBLED ADAPTERS, CABLES & FTA FOR

## EMERSON CHARMS BASE PLATE

| SL No. | CHARM IO Type                            | Wiring details                                                                      | Channel NO | Cable Core Size     | DT FTA Model No.   | DT Baseplate Adaptor Model No. | DT Prefab Cable    |
|--------|------------------------------------------|-------------------------------------------------------------------------------------|------------|---------------------|--------------------|--------------------------------|--------------------|
| 1      | DCS-AI 2W                                |    | 12         | 0.14mm <sup>2</sup> | DT-INT-SUBD2sM-243 | DTADPTR-02s-0012               | DT-CBL-1586-1-XX   |
| 2      | DCS-AI 3W                                |    | 12         | 0.82mm <sup>2</sup> | DT-INT-2DMCV-363   | DTADPTR-2DMCV-0254             | DT-CBL-1749-1-2-XX |
| 3      | DCS-AO                                   |    | 12         | 0.14mm <sup>2</sup> | DT-INT-SUBD2sM-243 | DTADPTR-02s-0012               | DT-CBL-1586-1-XX   |
| 4      | DCS-DI                                   |   | 12         | 0.14mm <sup>2</sup> | DT-INT-SUBD2sM-243 | DTADPTR-02s-0012               | DT-CBL-1586-1-XX   |
| 5      | DCS-DO High Side                         |  | 12         | 0.14mm <sup>2</sup> | DT-INT-SUBD2sM-243 | DTADPTR-02s-0012               | DT-CBL-1586-1-XX   |
| 6      | DCS-DO Isolated with Fuse Injected Power |  | 12         | 0.82mm <sup>2</sup> | DT-INT-2BLT2-242   | DTADPTR-2BLT-0024              | DT-CBL-1587-1-2-XX |

# SELECTION GUIDE FOR PRE-ASSEMBLED ADAPTERS, CABLES & FTA FOR

## EMERSON CHARMS BASE PLATE

| SL. No. | CHARM IO Type                                                               | Wiring details                                                                                                                                                                                   | Channel No. | Cable Core Size            | DT FTA Model No.   | DT Baseplate Adaptor Model No. | DT Prefab Cable      |
|---------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------|--------------------|--------------------------------|----------------------|
| 7       | DCS-DO with Relay Terminal Block                                            | <br><small>Standard 12V and 24VDC supply (DT-12V/24V) type terminals are used for relay terminal block.</small> | 12          | 0.82mm <sup>2</sup>        | DT-INT-2DMCV-363   | DTADPTR-2DMCV-0124             | DT-CBL-1748-1-2-JXX  |
| 8       | SIS-AI                                                                      |                                                                                                                 | 12          | 0.14mm <sup>2</sup>        | DT-INT-SUBD25M-243 | DTADPTR-D25-0012               | DT-CBL-1586-1-JXX    |
| 9       | SIS-AO                                                                      |                                                                                                                 | 12          | 0.14mm <sup>2</sup>        | DT-INT-SUBD25M-243 | DTADPTR-D25-0012               | DT-CBL-1586-1-JXX    |
| 10      | SIS-DI                                                                      | <br><small>Standard 12V and 24VDC supply (DT-12V/24V) type terminals are used.</small>                         | 12          | 0.14mm <sup>2</sup>        | DT-INT-SUBD25M-243 | DTADPTR-D25-0012               | DT-CBL-1586-1-JXX    |
| 11      | SIS-DO 500mA                                                                | <br><small>Standard 12V and 24VDC supply (DT-12V/24V) type terminals are used.</small>                        | 12          | 0.82mm <sup>2</sup>        | DT-INT-2BLT12-242  | DTADPTR-2BLT-0012              | DT-CBL-1587-1-2-JXX  |
| 12      | 4-20mA (2W)<br>4-20mA (3W with external power supply)<br>4-20mA (4W)<br>RTD |                                                                                                               | 12          | 19P<br>0.34mm <sup>2</sup> | DT-INT-AI12        | DTADPTR-D37-0124               | DT-CBL-2034-1-ZH-JXX |



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