

Process Multi-Loop Indicator DMY-2015 Process Data Acquisition Module TY-2095



Process DMY-2015 Multi-Loop Indicator



- Ideal for joint use with Virtual Recorder VR-2000.
- Indicator models available for:
 - 12 thermocouple inputs.
 - 8 RTD inputs.
 - 12 current inputs 4-20mA.
 - 12 voltage inputs 1-5Vdc.
 - Combinations from 2 input types above.
- Many optional modules are available:
 - Up to two SPDT relay alarm modules.
 - Water-proof front-panel.
 - RS-232 or RS-422/485 communication.
- They perform totalization of eight linear inputs with reset applied through the front panel buttons.
- High-visibility display configurable up to 4 digits and indication of the channel in a 2-digit display for DMY-2015 Multi-Loop Indicators.
- TY-2095 fitting up in DIN rails or surfaces. Its robust construction makes it tough enough for the most hostile environment.
- Power supply from 90 to 240Vac, 50/60Hz or dc levels.
- High accuracy. Linearization of RTD, thermocouple and also square root extraction.
- DMY-2015: Fully configurable by front-panel push-buttons.
 ACK button. TY-2095: Programmable by serial communication or through portable programmer.



The design of DMY-2015 Multi-Loop Indicators and TY-2095 Data Acquisition Modules is characterized by high reliability and precision, electrical noise and EMI immunity, besides well elaborated technical manual. These features make them ideal for industrial applications in Instrumentation and Process Control.

They have an extruded aluminum case and use the best origin components and parts, proven by rigorous tests and specified according to the strictest worldwide norms. There are several models available for each input type: 12 inputs for thermocouples, 12 current 4-20mA or voltage 1-5Vdc inputs; 8 RTD inputs or even combinations between two types. TY-2095 modules offer alarm monitoring and the use of serial communication make them ideal for data acquisition in digital systems, including Virtual Recorder VR-2000. Power supply is universal and can be connected from 90 to 240Vac or dc levels when specified. Flexibility and modularity concepts are clear due to the variety of modules available meeting the widest applications. Up to two alarm modules. Serial communication and digital output.



Order Code: | Model |-DMY-2015: Process Multi-Loop Indicator. TY-2095: Process Data Acquisition Module. I Inputs ⊢ 0 - 12 TC inputs 1 - 8 RTD inputs 2 - 6 TC and 4 RTD inputs 3 - 12 current inputs 4 - 12 voltage inputs 5 - 6 TC and 6 current inputs 6 - 6 TC and 6 voltage inputs 7 - 6 current and 6 voltage inputs 8 - 6 current and 4 RTD inputs 9 - 6 voltage and 4 RTD inputs | Output 1 | 0 - None 1 - SPDT Relay 2 - Open Collector Voltage I Output 2 ⊢ Same code of Output 1 I Power Supply ⊢ 1 - 90 to 240Vac or 130 to 340Vdc 2 - 24Vdc 3 - 12Vdc 4 - Others, under consult I Communication ⊢ 0 - None 1 - RS-232 2 - RS-485 3 - RS-422 | Case Protection Grade ⊢ 0 - General usage, protected place

- 1 Front aspersion-proof
- 2 Weather-proof

Specifications

TC inputs (J, K, T, E, R and S under ITS-90). RTD inputs (Pt-100 under DIN 43760).

4-20mA inputs with 250 Ω impedance.

1-5Vdc input with impedance greater than $10 M\Omega_{\cdot}$

Outputs

Up to two SPDT relays rated for 3A at 220Vac. Logic signal, open collector transistor, 40mA/24Vdc maximum with isolation.

Serial Communication

RS-232 or RS-422/485 with 50Vdc isolation.

DMY-2015: 14mm red leds display with four digits which can be configured together with the decimal point. Totalization

Totalization of eight voltage or current inputs ranging from 0 to 9999, configured with the decimal point.

Configuration

By front-panel push-buttons or portable configuration module.

Sampling Rate

480 ms standard. One second display update rate.

 $\pm~0.1\%$ of full scale for TC, RTD, mA and Vdc input.

Linearization

 $\pm~0.1\%$ of full scale for RTD and $\pm~0.2\%$ of full scale for TC.

Square Root Extration

 $\pm~0.5\%$ of reading, for input above 10% of span. Cut-Off programmable from 0 to 5%.

Digital Filters

First order digital filters applied to the inputs with time constant from 0.0 to 25.0 seconds.

Cold Junction Compensation

 $\pm~2.0^{\circ}\text{C}$ at range from 0 to 50°C ambient temperature.

Span Temperature Coefficient

 $\pm~0.005\%$ of span for °C, at 25°C ambient temperature.

Power Supply

90 to 240Vac 50/60Hz, 24Vdc, 12Vdc or other values. 10W nominal. See order code.

Operating Ambient

0 to 50°C temperature and 90% maximum relative humidity.

Dimensions

DMY-2015: 1/4 DIN (96x96x170mm) HxWxD, (92x92mm) HxW panel cutout.

TY-2095: (140x93x162mm) HxWxD.

Weight

0.7kg nominal.

Warranty

One-year warranty.