



DMY-2011  
DMY-2035

# Process Dual Indicators

- Many optional modules are available:
  - Up to two analog output modules of 4-20mA, 1-5Vdc and 0-10Vdc.
  - Up to four SPDT and SPST relay alarm modules.
  - Water-proof front-panel.
  - RS-232 or RS-422/485 communication.
- Two universal standard inputs for RTD, thermocouples, 0-55mV, 4-20mA, 1-5Vdc and 0-10Vdc. Available specific models for two frequency input signals up to 30kHz, from 300mVpp to 30Vpp.
- Indicate 2 variables simultaneously.
- Their robust construction make them 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.
- Fully configurable by front-panel push-buttons.
- ACK button.
- Configuration stored in non-volatile memory.

The design of DMY-2011 and DMY-2035 Indicators 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. They offer two standard universal inputs that can be 4-20mA, 1-5Vdc, 0-10Vdc, 0-55mVdc, thermocouples and RTD; also standard is the 24Vdc power supply for two-wire transmitter. This way, you can use an input to measure flow through a two-wire transmitter and other input to measure temperature through thermocouples or RTDs. Two frequency inputs are available, in specific instrument, for signals up to 30kHz, from 300mVpp to 30Vpp and 70Vdc max. DIN 19234 compliance for intrinsically safe NAMUR sensors.

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 four alarm modules. One or two analog output of 4-20mA, 1-5Vdc or 0-10Vdc. Serial communication and digital input-output.

**Order Code:** DMY - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]

**| Model |**

- 2011 - Universal inputs, dual Process Indicator. 1/4 DIN
- 2035 - Universal inputs, dual Process Indicator. 1/8 DIN
- 2011-F - Frequency inputs, dual Process Indicator. 1/4 DIN
- 2035-F - Frequency inputs, dual Process Indicator. 1/8 DIN

**| Output 1 |**

- 0 - None
- 1 - 4-20mA
- 2 - 1-5Vdc
- 3 - 0-10Vdc
- 4 - SPST Relay
- 5 - Open Collector Voltage

**| Output 2 |**

Same code of Output 1

**| Output 3 |**

- 0 - None
- 1 - SPDT Relay
- 2 - Open Collector Voltage

**| Output 4 |**

Same code of Output 3

**| Power Supply |**

- 1 - 90 to 240Vac or 130 to 340Vdc
- 2 - 24Vdc
- 3 - 12Vdc
- 4 - Others, under consult

**| 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

### Inputs

Universal inputs models for thermocouple (J, K, T, E, R or S under ITS-90), 0-55mV, RTD under DIN 43760, 4-20mA, 1-5Vdc and 0-10Vdc selected by user. Input impedance of 250Ω for mA, 10 MΩ for 5Vdc and 2 MΩ above 5Vdc.  
 Frequency inputs models for signals up to 30kHz, from 300mVpp to 30Vpp and 70Vdc max. DIN 19234 compliance for intrinsically safe NAMUR sensors.  
 Note: Universal or frequency inputs require different instruments. See order code.

### Outputs

4-20mA (750Ω maximum load), 1-5Vdc or 0-10Vdc analog retransmitter. Up to two optional modules galvanically isolated to 300Vac from power supply and inputs. Up to four SPST and SPDT relays rated for 3A at 220Vac. Logic signal, open collector transistor, 40mA/24Vdc maximum with isolation.  
 Note: There are 4 fitting connectors internally, so the total number of optional output modules is 4. See order code.

### Serial Communication

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

### Indication

DMY-2011: Two 14mm red leds displays with four digits.  
 DMY-2035: Two 9mm red leds displays with four digits.  
 Displays can be configured together with the decimal point.

### Configuration

By front-panel push-buttons and internal jumpers.

### Sampling Rate

120 ms standard. One second display update rate.

### Accuracy

± 0.1% of full scale for TC, RTD, mA, mV and Vdc input.  
 ± 0.5% of full scale for analog retransmitter output.  
 ± the display resolution for frequency input.

### Linearization

± 0.1% of full scale for RTD and ± 0.2% of full scale for TC.

### Square Root Extration

± 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

± 2.0°C at range from 0 to 50°C ambient temperature.

### 2-Wire Transmitter Power Supply

24Vdc/50mA maximum, isolated from output with short circuit protection.

### Span Temperature Coefficient

± 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-2011: 1/4 DIN (96x96x170mm) HxWxD, (92x92mm) HxW panel cutout.  
 DMY-2035: 1/8 DIN (96x48x170mm) HxWxD, (92x45mm) HxW panel cutout.

### Weight

0.5kg nominal.

### Warranty

One-year warranty.