Model 1500 Digital Transmitter

Meriam's 1500 Digital Transmitters are for high accuracy applications for OEM's, on manufactured skids, in process control systems and plant instrumentation. RS-485 communications allows for easy configuration using a PC or laptop computer. The RS-485 addressable interface allows up to 32 devices to be networked together. Optional 1-5 Volt or 4 - 20 mA outputs are also configured from a PC or laptop.

- ± 0.025% of URL (Upper Range Limit).
- Absolute, gauge and differential pressure sensors.
- 316SS isolated sensors for wet/corrosive process.
- Cost saving, non-isolated sensors for gas service.
- No temperature effect on RS-485 output from 23° to 122° F.

Standard Features on the 1500 Digital Transmitter

- **Damping rates:** User selectable from 0.1 to 25 seconds
- **NIST Traceability:** NIST certificate supplied with all models.
- **Temperature Range:**
  Storage: -40˚F to 140˚F (-40˚C to 60˚C)
  Operating: 23˚F to 122˚F (-5˚C to 50˚C)
- **Process Connections:**
  Pressure: 1/8" female NPT, 316ss
  Electrical: DB-9
- **Media compatibility:** Non-isolated Differential sensor (DN) for clean, dry, non-corrosive gases. Isolated Gauge and Absolute sensor (GI and AI) for fluids compatible with 316ss.
- **Pressure limits:** Twice range on Gauge and Absolute (GI and AI) units. Twice range on Differential (DN) units when pressurized on high side only and 150 PSI (10.5 Kg/cm^2) static when applied to both sides of the sensor simultaneously.
- **Engineering units:** cm H_2O, in H_2O (at 39.2, 60 and 68˚F), mBar, Bar, mm Hg, in Hg at 0˚C, PSI, kPa, Kg/cm^2 and user scaled.
- **Enclosure:** 2" x 4" x 4" NEMA 12 Aluminum Housing
- **Mounting:** Standard transmitter secures by pressure connections. Optional mountings are DIN rail clip or surface/wall mount flange.
- **Weight:** DN units are 1 lb.
  GI & AI units are 2 lb.

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1500 Digital Transmitter Output Specifications

- Output Accuracy:

RS-485	± 0.025 % of URL (±0.1% 20" sensor)
4 - 20 mA	± 0.05% of URL. ± 0.125% on 20" sensor ± 0.125% span @ 4:1 turndown of URL
1 - 5 VDC (or 0 - 5V)	± 0.05% of URL ± 0.125% on 20" sensor ± 0.125% span @ 4:1 turndown of URL

- Output Temperature Effect:
  Digital Output: No temperature effect from -5° C to 50° C

  Analog Output: ± .005% of span /° C
- Long Term Stability: ± 0.1% URL per year

- Output Options:
  RS-485 (standard): Half Duplex, 3 wire- TR-1, TR-0, and Signal ground. 9600 baud, 1 start bit, 1 stop bit and no parity. External power of 7 to 32 VDC (40 mA max). Multi-drop addressing with up to 32 devices maximum per RS-485 segment. RS-485 repeaters for additional segments.

  4-20 mA (optional): 2 wire current loop. 17 to 32 VDC for loop supplied 4-20 mA.

  1-5V (or 0 - 5V) (optional) : 4 wire, 17 to 32 VDC powered.

1500 Digital Transmitter
Digital Communications

RS-485 PROGRAMMING:
Pressure zero set
Reset factory zero
Analog output span and offset factor set
Damping factor set
Engineering unit selection
Multi drop address selection

1500 Transmitter Accessories/Options:

RS-485 interface devices
Process connection adapters
Electrical connection adapters
System setup software
Simultaneous digital communications and analog outputs

1500 Digital Transmitter Ordering Information

DN0020	0-20" H_2O	Differential
DN0200	0-200" H_2O	Differential
DN2000	0-2000" H_2O	Differential
GI0020	0-20 PSI	Gauge
GI0200	0-200 PSI	Gauge
GI2000	0-2000 PSI	Gauge
AI2000	0-2000 mm Hg	Absolute
AI0900	0-900 mm Hg	Absolute

Please Specify the Model Number and Sensor Type. Example is based on a Model 1500 with a 200" H_2O Differential sensor
1500DN0200