

New DL161 Wireless Miniature Data Loggers

Wide range of measurements!

Our new DL161-series data loggers are low cost, high resolution (16-bit), stand-alone instruments that are designed to adapt to a wide range of applications. The small size and wireless capability allows it to fit almost anywhere. Start simplifying your record keeping today.

SPECIAL FEATURES

- Simultaneously analyze data from several units*
- 16 Bit Resolution*
- Programmable Start Time*
- Programmable Calibration*
- Memory Wrap Around*
- Reusable*
- Real Time Operation*
- Programmable Engineering Units*



DL161 Transmitter

A real time clock ensures that all data is time and date stamped. All measurements are stored in non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. Collect data in batch or real-time operating modes.

The DL161 wireless data logger allows data to be transmitted up to 1 mile away from a computer. Once connected, all communication between the computer and the data logger is transparent to the user. The wireless link then allows full computer control over the data logger without the need for push-button start or stop. The transceiver modules can be configured directly through the datalogger software, which allows the user to easily switch between multiple transceivers on the same network. Individual addressing eliminates interference issues associated with multiple modules. Multiple transceivers can be used with one base unit.

Set up your data logger with our simple, straightforward Windows-compatible software program. Your system can be operational in minutes. Set the date, time, user ID, and other parameters quickly through the PC. One software package is all that is needed to operate all of these data loggers. Plot the data and calculate Max, Min, Mean, and Standard Deviation. Export data to Excel. See the data logger software sheet for complete details. Software not included with data logger purchase.

APPLICATIONS

- HVAC*
- Medical / Pharmaceutical*
- Warehouses / Museums*
- Process Monitoring / Recording*
- Predictive Maintenance*
- Environmental Studies*
- Monitor Perishable Goods in Transit*
- Replace Costly Strip Chart Recorders*

DL161 Data Loggers

DL161 Ordering Information

Part No.	Model No.	Parameter	Range	Acc.	Resol.	Memory	Features
DL161.001	DL161T	Temperature	-40 to 80°C	±0.5°C	0.1°C	32,767	Red LED Status or Alarm. NIST.
DL161.002	DL161TH	Temperature	-40 to 80°C	±0.5°C	0.1°C	21,845 per channel	Red LED Status or Alarm. NIST.
		Humidity	5 to 95%	±3%	0.5%		
DL161.003	DL161Tc	Temperature	-40 to 80°C	±0.5°C	0.1°C	16,383 per channel	Ambient temp. with second channel for remote thermocouple. Program for types J, K, T, E, R, S, B, N. Red LED Status or Alarm. NIST.
		Remote Temperature	Thermocouple- -260 to 1370°C	±0.5°C (est.)	0.1°C		
DL161.012	DL161V	Remote Voltage	-100 to 100 mVDC	±0.01% FSR	5 µVDC	32,767	Green LED sampling indicator. Progr Eng Unit.
DL161.013	DL161V	Remote Voltage	-.025 to 2.75 VDC	±0.01% FSR	0.1 mVDC	32,767	Green LED sampling indicator. Progr Eng Unit.
DL161.004	DL161V	Remote Voltage	-1 to 16 VDC	±0.1% FSR	0.5 mVDC	32,767	Green LED sampling indicator. Progr Eng Unit.
DL161.014	DL161V	Remote Voltage	-2 to 32 VDC	±0.1% FSR	1 mVDC	32,767	Green LED sampling indicator. Progr Eng Unit.
DL161.016	DL161mA	Remote Current	-1 to 1 mADC	±0.5% FSR	0.05 µADC	32,767	Up to 10 year battery life. Green LED sampling indicator. Progr Eng Unit.
DL161.005	DL161mA	Remote Current	-25 to 25 mADC	±0.1% FSR	1 µADC	32,767	Up to 10 year battery life. Green LED sampling indicator. Progr Eng Unit.
DL161.015	DL161mA	Remote Current	-20 to 100 mADC	±0.1% FSR	10 µADC	32,767	Green LED sampling indicator. Progr Eng Unit.
DL161.017	DL161mA	Remote Current	-100 to 100 mADC	±0.1% FSR	5 µADC	32,767	Up to 10 year battery life. Green LED sampling indicator. Progr Eng Unit.
DL161.006	DL161Pu	Remote Pulse/Event	0 to 100 pulses/sec; 4,320,000 pulses/interval	1ms pulse; 10ms period	1 count	16,383 intervals	10K ohm impedance. Green LED sampling indicator. Progr Eng Unit. (+30VDC Max Pulse)
DL161.008	DL161TPr	Temperature	-40 to 80°C	±0.5°C	0.1°C	8,191 per channel	Green LED sampling indicator. Progr Eng Unit. Auto calculation of mmHg, inches, Pascals, Torr, etc. NIST.
		Pressure	0 to 30 psia	±2% FSR	0.002 PSIA		
DL161.009	DL161THPr	Temperature	-40 to 80°C	±0.5°C	0.1°C	13,107 per channel	Green LED sampling indicator. Progr Eng Unit. Auto calculation of mmHg, inches, Pascals, Torr, etc. Ambient temperature and humidity. NIST.
		Humidity	5 to 95%	±3%	0.5%		
		Pressure	0 to 30 psia	±2% FSR	0.002 PSIA		
DL161.010	DL161RTD	Remote RTD	-200 to 850°C	±0.05°C	0.01°C	21,845	Green LED sampling indicator. NIST.
DL161.011	DL161pHT	Remote pH	0.00 to 14.00 pH	±0.1 pH	0.01 pH	13,107 per channel	Green LED sampling indicator. BNC connector for pH. 100 ohm Pt100 (2, 3, or 4-wire).
		Remote RTD	-200 to 850°C	±0.1°C	0.1°C		

* larger package size. See dimensions. **Remote indicates external sensor required. Not included with package.

DL161 Data Loggers

SPECIFICATIONS - Data Logger

Measurement Range:	See ordering table on page 2
Accuracy:	See ordering table on page 2
Repeatability:	See ordering table on page 2
Memory:	See ordering table on page 2
Sampling Interval:	Prog. 2, 5, 10, 15, 30 sec; 1, 5, 10, 15, 30 min; 1, 2, 4, 8, 12 hrs.
Operating Cond:	-40 to 80°C (-36 to 176°F); 15 to 95%RH (non-condensing)
Enclosure	ABS, IP22
Power:	3.5V Lithium, 1yr life typ.
Dimensions: (L x W x D)	56 x 35 x 15 mm (2.2 x 1.4 x 0.6 in.)
pH	95 x 60 x 25 mm (3.7 x 2.4 x 1 in.)
Weight:	Approx. 26g (0.9 oz); 113g (4 oz)
Shipping Weight:	Approx. 0.45kg (1 lb)

SPECIFICATIONS - Transceiver

Transmitting Distance:	Indoors: 600 to 1500 ft (183 to 460 m) Outdoors: 0.5 mi. typ. (0.8 km) Line-Of-Sight: 1 mi. (1.6 km)
Radio Frequency:	902-928 MHz; unlicensed ISM band
Approvals:	US (FCC), CA (IC)
Input Connection:	DB-9F Serial Port
Engineering Units:	Software programmable
Memory Wrap Around:	Selectable in software
Power Requirements:	7-18 VDC; Wall mount adapter inc.
Operating Env.:	0 to 70°C (32 to 158°F) 10% to 90%RH (non-condensing)
Dimensions: (L x W x H)	71 x 140 x 30 mm 2.8 x 5.5 x 1.2 in. + 7in. antenna
Weight:	200g (7 oz.)

DL161 Accessories Ordering Information

DL161.950	Windows® Software with PC interface cable. Windows 95/98, Me, NT, 2000, XP.
DL161.952	NIST-traceable Certificate of Calibration.
DL161.954U	USB Interface Cable for DL161 Series
DL160.952	Repl Batteries. 3.5V lithium.
DL160.953	Repl Connectors - 2 terminal.
DL160.954	Repl Connectors - 4 terminal.

Need a wireless system? Check out our new RF transmitters for continuous data acquisition with a wireless system!

Specifications subject to change.

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