

GDL Datalogger

MULTI-CHANNEL DATALOGGER



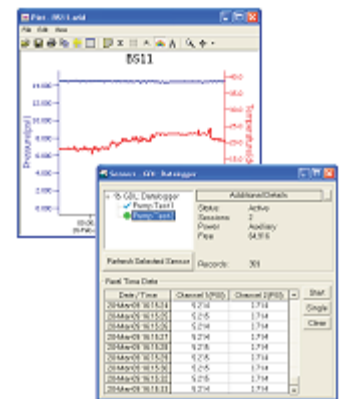
APPLICATIONS

Stormwater discharge monitoring
Water quality monitoring
Irrigation control
Stream gauging
Wetland monitoring
Well, tank, tidal levels

Rugged, portable, compact, versatile

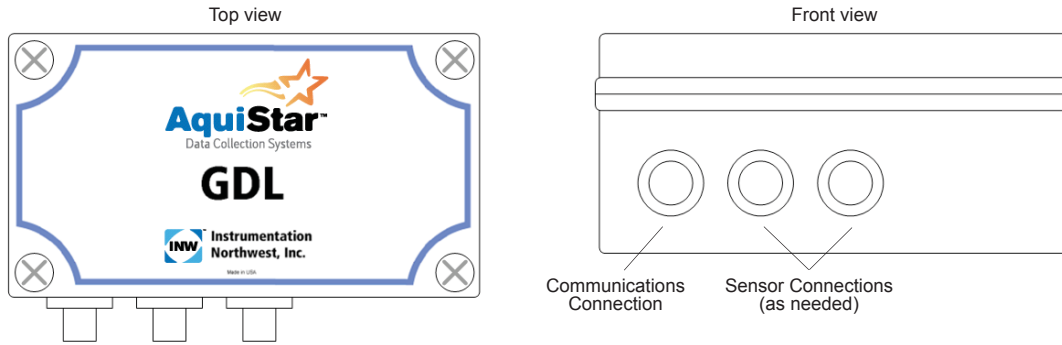
Features

- 7 standard channels
- Optional digital channels
- Standard or User Defined Units — *display your 4-20 mA or voltage readings in units of your choosing*
- Converts analog signals to digital signals
- Modbus® and SDI-12 interface for greater flexibility
- Over 25,000 records — *non-volatile memory*
- RS485 network — *connect with other AquiStar® Smart Sensors*
- Wireless connectivity — *radios and/or cellular*
- Small, rugged control box — *polycarbonate (IP67)*
- Transient protection
- Programmable warm-up time — *easily set the required warm-up time for your particular equipment*



FREE AQUA4PLUS SOFTWARE

- Easily calibrate your sensors — *built-in calibration calculator*
- Set up flexible recording sequences
- Retrieve data
- Monitor real time data
- View collected data — *tables & graphs*
- Export to spreadsheets and databases with a click of a button



SPECIFICATIONS

TEMPERATURE CHANNELS (THERMISTOR - 2 STANDARD)

Range (w/ 100 K ohm ref. res.)	-35° C to +105° C
Resolution	0.1° C Optional 0.06° C (up to 50°)

(Other ranges and resolutions available)

RESISTANCE CHANNELS (OPTIONAL IN PLACE OF THERMISTORS)

Range	300 - 34M ohms
Accuracy (at 25° C)	1% or better (300 - 3.7K ohms) 0.1% or better (3.7K - 3.2M ohms) 1% or better (3.2M to 34M ohms)

MILLIVOLT CHANNEL (1 STANDARD)

(Can be reconfigured as 4-20mA)

Differential measurement range	± 150mV
Common mode voltage range	-150mV .. +3.75V

RANGES	RESOLUTION	RANGES	RESOLUTION
± 150 mV	4.578 µV	± 18.5 mV	0.572 µV
± 75 mV	2.289 µV	± 9.375 mV	0.286 µV
± 37.5 mV	1.144 µV	± 4.6875 mV	0.143 µV

Excitation Voltage 3.00V
(for precision excitation of strain gauge sensor)

VOLTAGE CHANNELS (2 STANDARD)

(Can be reconfigured as 4-20mA)

Differential measurement range	± 6.0 V
Common mode voltage range	-6.0V .. +15.0V

RANGES	RESOLUTION	RANGES	RESOLUTION
± 5 V	183.108 µV	± 0.6 V	22.889 µV
± 2.5 V	91.554 µV	± 0.3 V	11.444 µV
± 1.25 V	45.777 µV	± 0.15 V	5.722 µV

4-20 MA CHANNELS (2 STANDARD)

Range	0 to 24 mA
Resolution	730 nA
Common mode voltage range	0V .. 5.25V

OPTIONAL DIGITAL CHANNELS

Dissolved Oxygen	Rain Gauge
Heart Rate	Custom Channels
Flow	

POWER SUPPLY

Can supply power to connected sensors

Internal (AA alkaline cells)	12 VDC or 3 VDC
Auxiliary	6.0V - 24.0V (not to exceed 24.0V)
Switched voltage channel	up to 48V at 50 mA (current limited to 65mA)
Power consumption*	Sleep mode w/ 3 volts: 200 µW Active mode w/ 3 volts: 10.5 mW Sleep mode w/ 12 volts: 625 µW Active mode w/ 12 volts: 11 mW

*Exclusive of digital expansion board and any attached devices

ENCLOSURE

Material	Polycarbonate (IP67)
Dimensions	5.5" x 3.1" x 2.6" (14 x 7.9 x 6.6 cm) (excluding connectors)
Connections	1 communication port 1 or more sensor ports

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