GDL Datalogger
MULTI-CHANNEL DATALOGGER

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

APPLICATIONS

Stormwater discharge monitoring
Water quality monitoring
Irrigation control
Stream gauging
Wetland monitoring
Well, tank, tidal levels
**GDL Datalogger/Multi-Channel Datalogger**

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**SPECIFICATIONS**

**TEMPERATURE CHANNELS (THERMISTOR - 2 STANDARD)**

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

(Optional 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 |
| ± 150 mV | 4.578 μV |
| ± 75 mV | 2.289 μV |
| ± 37.5 mV | 1.144 μV |

Excitation Voltage

(for precision excitation of strain gauge sensor)

3.00V

**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 |
| ± 5 V | 183.108 μV |
| ± 2.5 V | 91.554 μV |
| ± 1.25 V | 45.777 μV |

| RESOLUTION |
| ± 0.6 V | 22.889 μV |
| ± 0.3 V | 11.444 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

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 uW

Active mode w/ 3 volts: 10.5 mW

Sleep mode w/ 12 volts: 625 uW

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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