

# Data Logger & Internet Gateway 2000 Series



## Features:

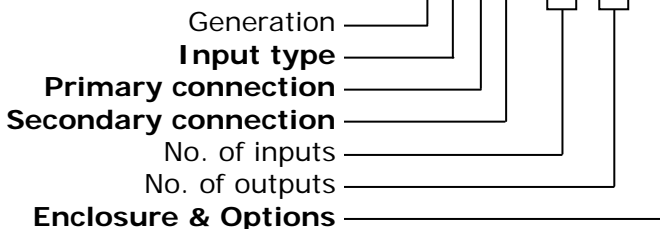
- ❖ Internet Gateway with built-in Ethernet
- ❖ Multiple Internet connectivity options
- ❖ 10 input and 2 output channels
- ❖ Analogue (4-20mA, 0-5V) inputs
- ❖ Digital (5V, Volt-free contact) inputs
- ❖ Pulse (metering) inputs
- ❖ Global & Local Closed Loop Control

## Applications:

- ❖ Condition Monitoring
- ❖ Power Management, Trending
- ❖ Remote Metering / Sub Metering
- ❖ Scientific and Industrial data acquisition
- ❖ Global & Local automation

## How to order

**2151.1002 X**



## Product Description

The Gateway 2000 Series is designed for remote data acquisition via the Internet. Up to 8 of the 10 input channels are user-programmable to receive analogue signals. Internet connectivity options include PSTN, LAN, GSM, GPRS, V-SAT, ACeS, and radio modems. Dual (redundant) connectivity options are also available.

## Order options available for this series

### Input Type option

- 0: Digital or Pulse (selectable)
- 1: Digital, Pulse or Analogue (selectable)

### Enclosure & options

- X: Open frame – board only
- E: Board in ABS Enclosure
- U: Board in ABS Enclosure c/w UPS

### Internet Connectivity codes

- 0: None (for Slaves Devices only)
- 1: Built-in modem (PSTN)
- 2: External PSTN
- 3: External GSM
- 4: External GPRS
- 5: Ethernet 10/100baseT (LAN)
- 6: WiFi
- 7: V-SAT
- 8: Satellite dialup modem (ACeS)

### Internet Connectivity options [Primary.Secondary]<sup>+</sup>

- |     |  |     |                               |
|-----|--|-----|-------------------------------|
| 0.0 | Slave Device connecting via Gateway only | 6.6 | WiFi only*                    |
| 1.1 | Built-in PSTN only*                      | 6.1 | WiFi, Built-in PSTN backup    |
| 1.3 | Built-in PSTN, GSM back up               | 6.2 | WiFi, External PSTN backup    |
| 1.4 | Built-in PSTN, GPRS back up              | 6.3 | WiFi, External GSM back up    |
| 2.2 | External PSTN only*                      | 6.4 | WiFi, External GPRS back up   |
| 3.3 | External GSM only*                       | 7.7 | V-SAT only*                   |
| 4.4 | External GPRS only*                      | 8.8 | Satellite dial up (ACeS) only |
| 5.5 | LAN only*                                |     |                               |
| 5.1 | LAN, Built-in PSTN back up               |     |                               |
| 5.2 | LAN, External PSTN back up               |     |                               |
| 5.3 | LAN, External GSM back up                |     |                               |
| 5.4 | LAN, External GPRS backup                |     |                               |

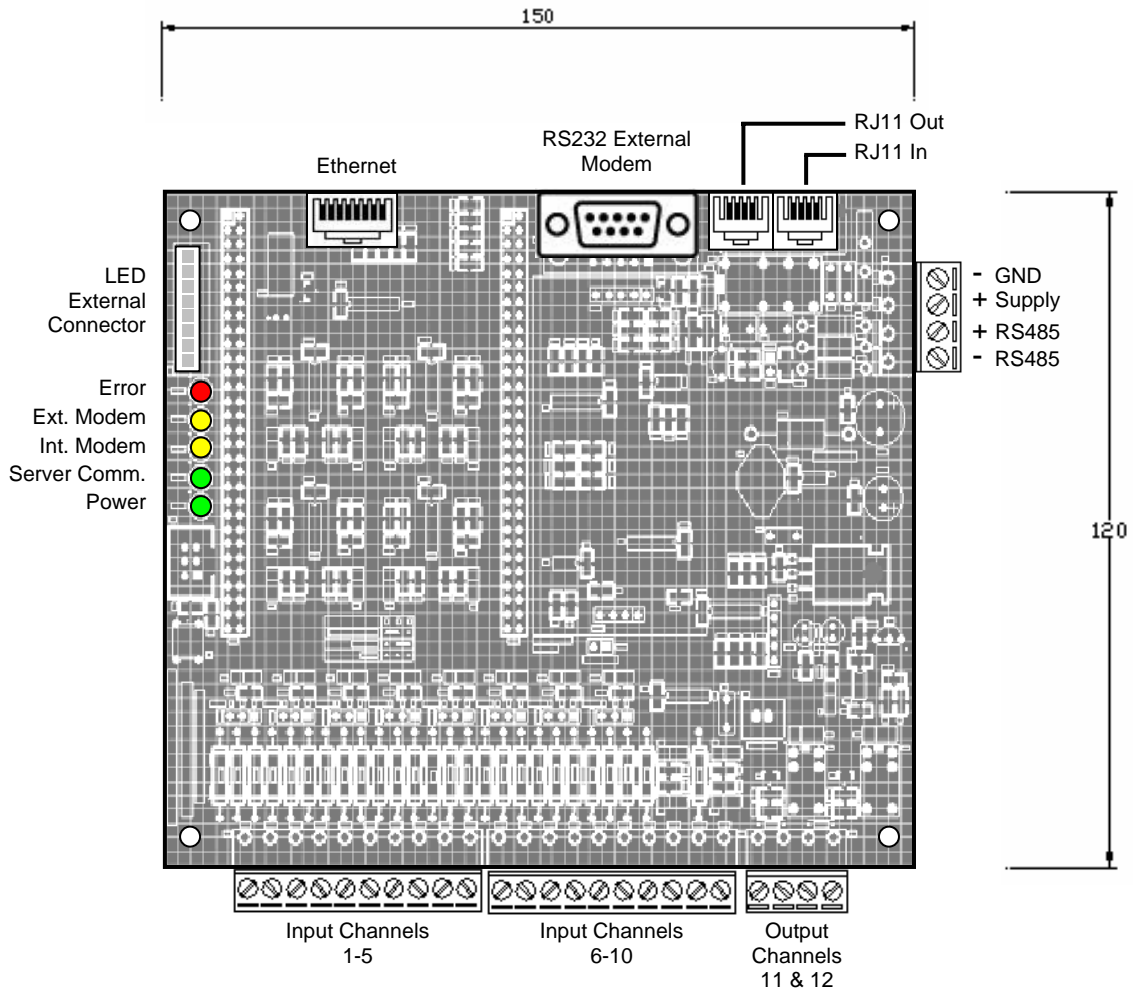
<sup>+</sup> Only the listed combinations are supported

\* When primary and secondary Internet connectivity codes are identical, there is no redundancy.

## Product Specifications

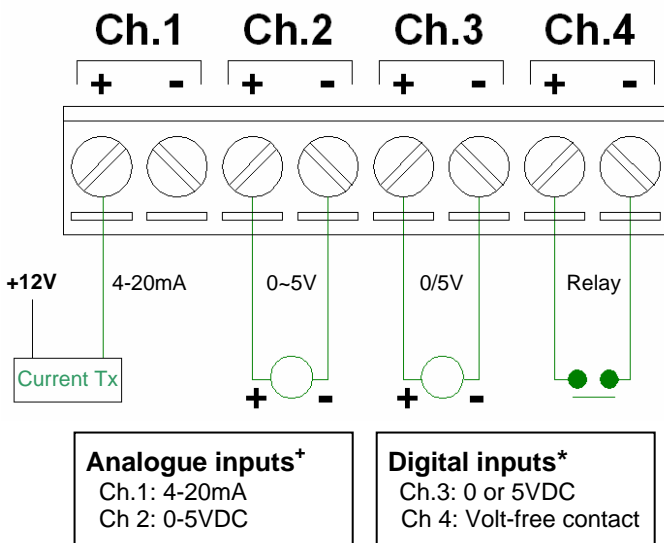
Input channels	10 channels
Output channels	2 channels, Normally Open contacts; 0.5 A at 125 VAC, 1 A at 24 VDC
Input type supported	Analogue (4-20mA, 0-5V), Digital (5V, Volt-free contacts), Pulse (for metering)
Input mode selection	<b>Channels 1-8</b> , user selectable
	(a) Analogue: 0 - 5V; ADC resolution of 1:4096 counts (models 21nn.1002 only)
	(b) Analogue: 4 - 20mA; ADC resolution of 1:3080 counts (models 21nn.1002 only)
	(c) Pulse: 100 – 200 ms
	(d) Digital: 5V or Volt-free relay contact
	<b>Channels 9-10</b> , user selectable - Digital or Pulse (Analogue not possible)
Analogue channels	12-bit resolution, single-ended, unipolar.
Input impedance	> 1M, for analogue channels.
Scan rate	300 milliseconds
Transmit interval	2 seconds
Sampling interval	Manual - 4 seconds fixed; Automatic – 15 seconds to 24 hours, programmable
Logging interval	4 seconds to 24 hours
Events logging	100 events max
Analogue logging	100 sets of max
Pulse logging	250 pulses max
Memory	Non-volatile memory
Memory backup	Vanadium Pentoxide Lithium Coin Battery; 3V, 7mAh
Firmware upgrade	Server managed, Automatic
Ethernet	LAN, WiFi; 10Mbps Half Duplex
Modem	Internal: PSTN 2.4kbps
	External: PSTN, GSM, GPRS, RF, Satellite (ACeS); RS232, 57600bps
Backup connectivity	Supported with internal or external modem for selected models
Slave I/O expansion	RS485, 4800bps, max 15 external slave devices, max 1000 meters
Computer I/O	RJ45, cross-over cable, browser interface for device configuration
Status indicators	5 LEDs on-board with off-board connector; Error, Int. modem, Ext modem, Com, Pwr.
Server access	By Host IP or via DNS, programmable
Device password	User programmable
Data security	Device-Server encrypted
Data transmission	Event driven and Server initiated
Auto-Connect	10 minutes to Never
Auto-Disconnect	15 seconds to Never
System Check	Server supervised
Supply voltage	12-24VDC regulated
Typ. operating current	96 mA at 12V when online via Ethernet
Max. operating current	180 mA at 12V with 2 output relays activated and online via internal modem
Operating temperature	0-50 °C
Operating humidity	85% non-condensing
Event time stamp	Based local RTC, synchronized with iSCADA Server, referenced to UTC
Dimension WxDxH:	150 x 120 x 30 mm, open frame

# Mechanical Drawings



## Wiring Guide

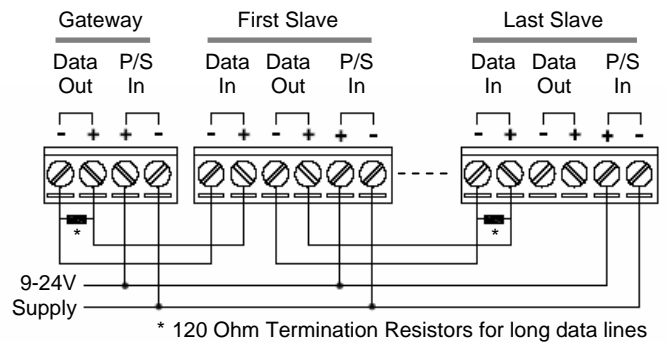
Input Channel connectors



<sup>+</sup> Applicable to channels 1-8, model 21nn.1002 only

<sup>\*</sup> Applicable to channels 1-10, all models

Power Supply and RS485 connectors



### Optional Accessories

- DC Power Supply
- Charger
- SLA Battery
- Interface boards
- Enclosure for multiple devices
- Sensors & Transducers