

## INT4-L

*Load Cell Input Panel Meter*



### KEY FEATURES

- 6 digit LED display
- 4 or 6 wire load cell input
- Up to 4mV/V as standard (10mV/V optional)
- 10 point linearisation
- 20-bit A/D converter
- 10V @ 120mA excitation voltage (5V optional)
- Powers up to 4 x 350Ω load cells
- Optional isolated analogue output
- Optional alarm outputs, 2 or 4 relays
- Optional data interface, RS232, RS422/485 or Modbus RTU

- **New single layer menu for easier setup**
- **Compatible with existing INT2 series**
- **IP65 front panel sealing**
- **Dust tight & low-pressure water jet protection**
- **IP67 front panel cover optional**
- **Various mounting options available**
- **User friendly manuals**
- **95-265V AC or 11-30V DC power**
- **Multi-program memory option**
- **Sensor drift correction**
- **Direct or theoretical calibration**
- **Adjustable display brightness**

### DESCRIPTION

The INT4-L is our most popular 1/8 DIN load cell input panel meter with its high precision and stability. The digital indicator utilises a modular construction technique which enable you to configure it with the exact functionality you require, this flexible approach ensures that you only pay for the features you need. Ideal for weight, torque, strain, pressure and stress measurements.

The load cell readout is provided by a 6 digit 7 segment LED display which is coupled with an ultra-high resolution 20-bit A/D converter and highly stable strain gauge bridge excitation source to provide your instrumentation with perfect resolution and stability. In addition the easy to use menu navigation allows you to have the indicator set up within minutes.

We offer a wide range of optional outputs including, voltage and current analogue outputs, 2 or 4 alarm relays with a wide range of configuration settings, data interface via RS232, RS422/485 + Modbus ASCII and Modbus RTU.

With backward compatibility with the existing INT2 series with its same front panel design, dimensions and connections it makes transitioning over to the INT4 easy.

## TECHNICAL DATA

<b>Display</b>	6 digit, 7 segment LED, 14mm high (-199999 to +999999)
<b>Viewing Distance</b>	7m
<b>Digit Colour</b>	RED (standard), GREEN (optional), RED daylight viewing (optional)
<b>Input Signal</b>	Up to 4mV/V as standard (10mV/V optional)
<b>Power Supply</b>	95-265V AC (standard), 11-30V DC (optional)
<b>Power Burden</b>	10VA max
<b>Resolution</b>	1:400,000 max. (bipolar)
<b>Display Update Rate</b>	100ms
<b>Input Connections</b>	6 screw terminals for 4 or 6 wire bridge load cells
<b>Accuracy</b>	+/- 0.05% of range
<b>Linerisation</b>	10 points
<b>Filtering</b>	Adjustable from 0 to 25 seconds. active filter
<b>Last Digit Round-up</b>	Selectable 1, 2, 5, 10, 20 or 50
<b>Front Panel Controls</b>	Calibration, tare, reset, max/min, alarms
<b>Brightness</b>	Variable, 7 levels
<b>Thermal Stability - Range</b>	+/- 25ppm/°C
<b>Thermal Stability - Offset</b>	+/- 30ppm/°C
<b>Logic Inputs</b>	3 (normally open, NPN or contact closure)
<b>Logic Functions</b>	Hold, reset, tare, peak/valley, net/gross, memory address
<b>Unit of Measure Label</b>	Sheet of labels included

## EXCITATION

<b>Excitation Voltage</b>	10V DC nominal rated at 120mA (must connect to sense), 5V DC (optional)
<b>Excitation Sense</b>	Ratiometric, 4V absolute minimum allowed after line drops

## ENVIRONMENTAL

<b>Front Panel Sealing</b>	IP65 (standard), IP67 with optional SPC4 cover
<b>Storage Temperature</b>	-20 to +70°C, non-condensing
<b>Operating Temperature</b>	0 to 50°C, non-condensing

## ANALOGUE OUTPUT (optional)

<b>ANI Option</b>	0-20/4-20mA into 0 to 500 Ohms, resolution 0.4uA
<b>ANV Option</b>	0-10V into loads >600 Ohms, resolution 0.2mV
<b>ANB Option</b>	+/- 10V into loads >600 Ohms, resolution 0.4mV
<b>Scalable</b>	Yes
<b>Isolated</b>	Yes
<b>Accuracy</b>	0.1% of range
<b>Linearity</b>	+/- 0.02% of range
<b>Stability</b>	50ppm/°C

## ALARM OUTPUTS (optional)

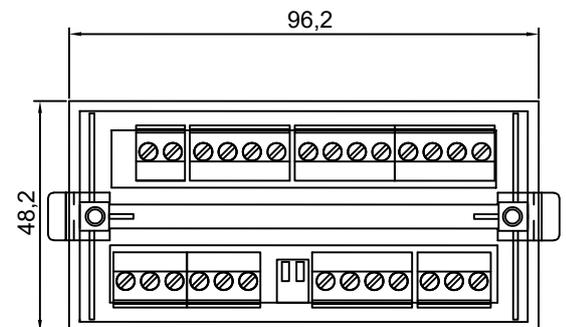
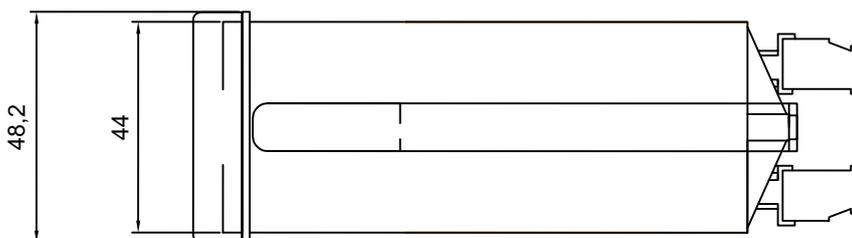
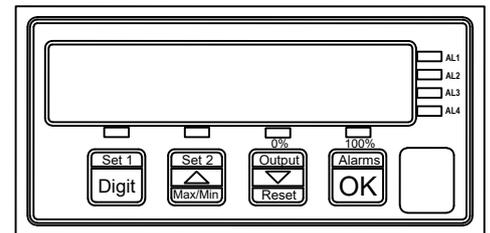
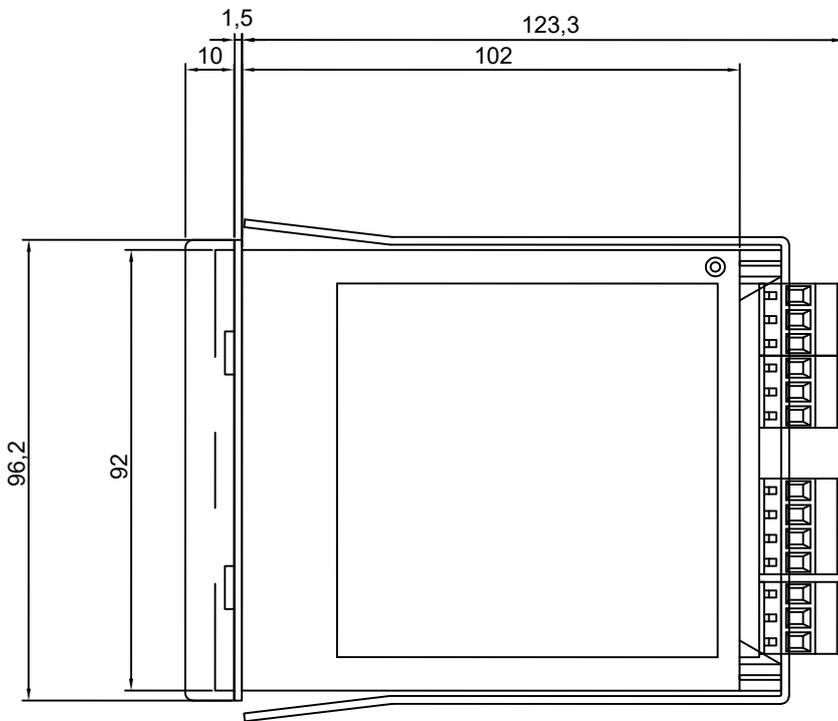
<b>AL2 Option</b>	2 x SPST mechanical relays, 2A @ 250V AC, resistive load
<b>AL4 Option</b>	4 x SPST mechanical relays, 2A @ 250V AC, resistive load
<b>DSS Option</b>	2 x solid state relays, specify AC or DC, 100mA max @ 250V AC, 500mA max @ 60V DC
<b>QSS Option</b>	4 x solid state relays, specify AC or DC, 100mA max @ 250V AC, 500mA max @ 60V DC
<b>SPCO Option</b>	2 x SPCO mechanical relays, 2A @ 250V AC, resistive load

## DATA INTERFACE (optional)

<b>232 Option</b>	RS232 ASCII
<b>485 Option</b>	RS422/RS485 ASCII + Modbus ASCII
<b>RTU Option</b>	RS485 Modbus RTU

## WEIGHTS AND DIMENSIONS

<b>Bezel Size</b>	96mm x 48mm
<b>Panel Cutout</b>	92±1mm x 45±1mm
<b>Depth Behind Panel</b>	125mm
<b>Case Width</b>	92mm
<b>Case Height</b>	44mm
<b>Case Depth</b>	134.8mm
<b>Typical Weight</b>	300 grams
<b>Individual Packed weight</b>	800 grams
<b>Individual Packed Dimensions</b>	190mm x 130mm x 65mm
<b>Case Material</b>	Black polycarbonate
<b>Cable Dimensions</b>	Accepts multi strand wires total area from 1mm <sup>2</sup> to 4mm <sup>2</sup>
<b>Mounting</b>	Panel (standard), DIN rail mounting (optional), wall mounting enclosure (optional)



## ORDERING CODES AND OPTIONS

	INT4	-L	-X	-X	-X	-X	-X	-X
<b>Input Type:</b>								
<b>Analogue Output:</b>								
None			0					
-10 to +10V			ANB					
4-20mA			ANI					
0-10V			ANV					
<b>Alarm Outputs:</b>								
None			0					
2 x SPST mechanical relays			AL2					
4 x SPST mechanical relays			AL4					
2 x solid state relays (specify AC or DC)			DSS					
4 x solid State relays (specify AC or DC)			QSS					
2 x SPCO mechanical relays			SPCO					
<b>Data Interface:</b>								
None			0					
RS232			232					
RS422/485 + Modbus ASCII			485					
Modbus RTU			RTU					
<b>Digit Colour:</b>								
GREEN						G		
RED						R		
RED daylight viewing (outdoor)						RDLV		
<b>Power:</b>								
95-265V AC						AC		
11-30V DC						DC		
<b>Options:</b>								
DIN rail								DIN
Wall mounting enclosure								WALLBOX
100mV load cell input								100mV
100 readings per second								100X
5V excitation								5VEXC
½ bridge load cell input								HALF BRIDGE
8 program memory								MEM
Programming buttons hidden behind plain lens								PLAINLENS
IP67 front cover								SPC4

### Ordering example:

The code **INT4-L-ANI-AL2-232-R-DC-DIN** means:

**INT4-L** - Load cell panel meter  
**ANI** - 4-20mA  
**AL2** - 2 x SPST mechanical relays  
**232** - RS232  
**R** - Red display  
**DC** - 11-30V DC  
**DIN** - DIN rail mounting

