

info@lvdt.co.uk

LVDTs, Displacement Sensors & Systems from the UK Experts

INT4-P Process Input Digital Indicator

Key Features:

- Compatible with all Common Voltage & Current Input Signals, i.e. 0-5Vdc, 0-10Vdc, 4-20mA
- 10 Point Linearisation for Improved Accuracy
- Compatible with INT2 Series
- New Single Layer Menu for Easier Setup
- Higher Stability with Signal Filtering Adjustment
- 6-Digit LED Display (±199999)
- Input: Voltage and Current
- Environmental Protection: IP65 (when installed)
- Sensor Excitation Supply (24Vdc, 40mA)
- Options: Alarm Relays, Analogue & Digital Outputs
- Ideal Replacement for Druck DPI 282 & 283 Indicators



- Optional IP67 Front Panel Cover
- Robust Construction
- Panel Mounted, 1/8 DIN Size
- 3 Year Warranty

The INT4-P is the latest version of the INT2-P featuring improved process filtering from your pressure transducer, level transmitter or depth sensor. The INT4-P is directly compatible with the INT2 series as it features the same front panel designs, dimensions and connections, for easy integration.

The INT4-P meter displays physical variables, such as weight, load, force and torque, providing you with a 24V regulated excitation supply, capable of providing up to 40mA of current to power a wide range of sensors and transducers. Improved accuracy is guaranteed with its 10 point user configurable lineariser, which is a standard feature on the INT4-P indicator.

The INT4-P is easy to configure with its new single layer menu for a simpler setup. The readout is provided by a 6-digit LED display (also configurable with 3, 4 or 5 digits if preferred) coupled with an ultra-high resolution 20-bit A/D converter and highly stable strain gauge bridge excitation source which provides superb resolution and stability in any application. The front panel has a 7 segment window for displaying the measurement allowing decimal point and minus sign characters to be included and has 4 alarm annunciators to show the status of each alarm relay.

Peak and valley memories allow you to view the maximum and minimum recorded measurements. Also, the meter can give alarm outputs, scaled and isolated analogue output and isolated serial data retransmission, when fitted with option boards.

A lockout switch on the rear of the meter saves your configuration settings in non-volatile memory, which has a 10 year guaranteed storage period. When the lockout switch is set to ON, your settings cannot be accidentally altered.

Our 3-year warranty applies to the Intuitive4-P and to any of our extensive range of transducers supplied with it, please <u>contact our sales team</u>.

Options:

- 95-265VAC or 11-30VDC Supply
- Voltage or Current Analogue Outputs
- RS232 ASCII, RS485 ASCII or RS485 ModBus RTU
- 2x or 4x Mechanical Alarm Relays (rated 5A @ 250Vac), 2x SPCO Relays, 2x or 4x Solid State Relays.



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Industries:

- Automotive
- Agriculture
- Silo and Weighing Industry
- Construction
- Alternative Energy
- Civil Engineering
- Lifting and Handling
- Waste Management

Applications:

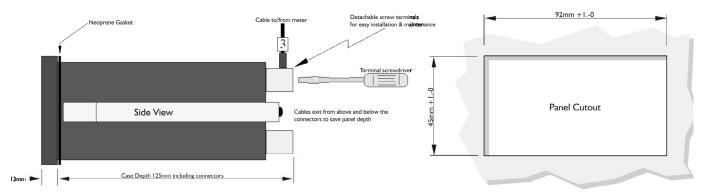
- Weighing Platforms
- Vessel Weighing Systems
- Weighbridges
- Conveyor Weighing Systems
- Bridge Structure Monitoring
- Waste Management Systems
- Lifting and Handling
- Monitoring of Anchor Loads
- Truck Load Weight Monitoring
- Skip Weighing System

- Multi-Cell or Multi-Transducer Installations
- Monitoring of Building Foundations
- Force Measurement in Formula Racing
- Silo Weighing
- Measuring the Power Output of a Motor
- Weighing Platforms

Specification:

CHARACTERISTICS	INTUITIVE4-P	UNITS				
Display	6 digit, 7 segment LED, 14mm high (-199999 to +199999)					
Resolution	1:400,000 max. (bipolar)					
Display Update Rate:	10/second					
Accuracy	<±0.05	% of range of mV input				
Sensor Excitation	24Vdc	Volts dc				
Maximum Excitation Current	40	mA				
Input Range	±5Vdc, ±10Vdc, 0-10mA, 0-20mA, 4-20mA					
Input Impedance	>10	Megaohms				
Digital Filtering	0 to 5 (adjustable)	Seconds effective time constant				
Display Count By	1, 2, 5, 10, 20, 50 digits (selectable)					
Analogue Output (Optional)	±10Vdc, 0-10Vdc or 4-20mA					
Operating Temperature	0 to +50	°C				
Thermal Drift	Span = 25, Zero = 30	ppm/°C				
Operating Voltage	100-240VAC (11-30VDC optional)					
Environmental Protection	IP65 (IP67 optional with SPC4 cover)					
Weight	300	Grams				
Panel Cutout	1/8 DIN (92mm x 45mm + I/-0)					
Features	Tare facility, peak & valley detection, 10-point linearisation, 1 program memory (8 optional)					
Trip Outputs (optional)	2x or 4x relays rated 5A @ 250Vac, 2x SPCO, 2x or 4x solid state					
Serial Data Output (optional)	RS232 (ASCII) / RS485 (ASCII or ModBus RTU)					

Dimensions (mm):







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INT4-P-ANI-AL2-0-R-AC-MEM	xample Code	INT4	-	P] -	ANI	-	AL2	-	0	-	R	-	AC	-	MEM
Product Family																
INT4		INT4														
Input Version																
L = Load Cell Input				L											П	
P = Process Input				Р												
C = Counter/Rate Input				С												
Analogue Output																
0 = None Fitted						0										
ANI = 4-20mA						ANI										
ANV = 0-10Vdc (uni-polar)						ANV										
ANB = ±10Vdc (bi-polar)						ANB										
Alarm Relays																
0 = None Fitted								0								
AL2 = 2 x Alarm Relays								AL2								
AL4 = 4 x Alarm Relays								AL4								
SPCO = 2 x SPCO Relays								SPCO								
DSS = 2 x Solid State Relays								DSS								
QSS = 4x Solid State Relays								QSS								
Serial Data Output																
0 = None Fitted										0						
232 = RS232 ASCII										232						
485 = RS485 ASCII										485						
RTU = RS485 ModBus RTU										RTU						
Display Colour																
R = Red												R				
RDLV = Red for Daylight Viewing												RDLV				
G = Green												G				
Supply Voltage																
AC = 100-240Vac Universal Mains Supply														AC		
DC = 11-30Vdc														DC		
Additional & Special Features																
0 = None																0
100mV = 100mV Input (INT4-L only)																100mV
100X = Fast Version with 100 Updates/Second																100X
VEXC = 5V Excitation Output																5VEXC
DIN = DIN Rail Mounting Option																DIN
H = Real Time Clock Module																Н
Half Bridge = 1/2 Bridge Input for Load Cell Meters																Half Bridge
MEM = 8 Calibration Memory (8 different load cells) - Requires 8-	way Switch															MEM
NAMUR = Namur Pulse Input for Counters/Ratemeters																NAMUR
PBEXT = Connection for 4 External Programming Buttons																PBEXT
Plainlens = Plain Front Cover (no buttons)																Plainlens
POT = 3 Wire Potentiometer Input (INT4-P only)																POT
SPC4 = IP67 Front Panel Cover																SPC4
WALLBOX = IP65 Wall-Mounted Enclosure																WALLBOX
xxxmV = Alternative Input Sensitivity on INT2-L (5, 10, 30, 100 or	300mV/V)															xxxmV
PCC1 = Portable Desktop Enclosure (1 indicator)																PCC1
PCC2 = Portable Desktop Enclosure (2 Indicators)																PCC2
Speak to Sales = Other special features will be determined by sal	les.															????



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Accessories:

SPC4: IP67 Splash-Proof Cover:

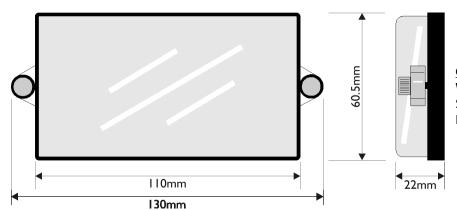


- Fits All Intuitive2 and Intuitive4 Indicators
- Low Cost
- Easy to Install
- Immersion Protected up to 1metre
- Impact Resistant
- Fits Most 1/8 DIN Meters
- Non-Ferrous Parts for Longer Life
- Anti-Scratch Coating
- 3 Year Warranty

The SPC4 offers a low cost and robust method of sealing the front of all Intuitive2 and Intuitive4 indicators, along with most other manufacturers' 1/8 DIN size panel meters. The design uses all corrosion-resistant materials for longer life, meaning less maintenance. You can easily fit it to existing installations, or include it as a value-added accessory for new systems.

The panel cutout is the standard hole size for the panel meter, so no changes to the panel are needed. The front window is detachable, permitting adjustments to be made to the panel meter during commissioning and is held firmly in place by two knurled captive screws which resist accidental side or front impact.

The window and the holding frame are both moulded from a high impact resistant material. And, to give good reliability, the female threaded sections are made from marine brass and are moulded deep into the frame itself. Highly flexible and resilient neoprene gaskets firmly bonded to the inner and outer faces of the frame provide the reliable sealing effect, while for excellent clarity and resistance to scratching the covers are coated with a special anti-scuff treatment.



Construction Materials:

Window & Frame = Polycarbonate Screws = Nickel Plated Marine Brass Female Threaded Bushes = Marine Brass



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PCC: Portable Desktop Enclosure:



- Fits All Intuitive4 Indicators
- Portable
- Fused IEC Power Input
- Robust Construction
- Supply Fully-Wired and Ready to use
- Attractive Styling
- 3 Year Warranty

The PCC range of portable desktop instrument cases are designed specifically to suit our Intuitive4 and Intuitive2 range of digital indicators and are available in a range of formats for housing anything from single meter to suit simple measuring systems up to a bank of 12 meters for multiple-sensors in industrial process monitoring applications. Specially designed cases for greater numbers of meters can be offered if required - please contact sales to discuss your application in detail.

All cases are fitted with a fused IEC mains input and a single sensor connection per indicator as standard, while reset buttons, lights, alarm sounders, rotary selection switches and integral battery power/backup are just some of the options that can be added to suit your specific requirements.

Model: PCC1	Dimensions: W200mm x H65mm x D185mm
Model: PCC2	Dimensions: W300mm x H65mm x D185mm
Model: PCC4	Dimensions: W300mm x H145mm x D220mm
Model: PCC6	Dimensions: W510mm x H145mm x D220mm
Model: PCC12	Dimensions: W685mm x H240mm x D280mm

Associated Products:



AML/M Miniature LVDT Displacement Sensor



IL4-P Low Cost LVDT Indicator



AML/E Standard LVDT Displacement Sensor



PCC Portable Desktop Enclosure



AML/IE Industrial LVDT Displacement Sensor