

## Digital Process Indicators

## IDL-INT-C & IDL-INT-F

Function: IDL-INT-C and IDL-INT-F are panel mounting counter / totaliser and rate / frequency digital process indicators with 5 (Rate) or 6 (Counter) digit red LED displays. They are designed for use in instrumentation systems with NPN, PNP Contact Closure, 5, 24 Volt Pulse, Low/High Level AC Signal. The display can be preset, or adjusted by the user, to display engineering units. The indicators are 95 to 265 Volt AC or, optionally, 11 to 30 VDC powered and provided with screw terminals for all connections. The displays can be scaled from -199999 to +999999 full scale and the zero and span and decimal point are all programmed from front panel. Alarms, Analogue and Serial Outputs are available as optional extras.



Lee-Dickens Ltd

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### SPECIFICATIONS

#### INPUTS:

Signal Types  
NPN, PNP, Contact Closure  
5 or 24 Volt Pulse  
Low Level AC Signal  
High Level AC Signal

#### Amplitude

Minimum – 100mV RMS @  
1kHz with amplifier activated  
Maximum – 60V Pk to Pk

#### Frequency range

Minimum - 0.03Hz for “rate”  
No lower limit for “totalisers”  
Maximum – 50kHz for “rate”  
and “single input totaliser”  
5kHz for “gated totaliser”,  
“single and dual input  
UP/DOWN totaliser” and  
2.5kHz for “Quadrature totaliser”

#### Logic Inputs

TARE, Peak/Valley and RESET

#### DISPLAYS:

Display  
5 digit red LED(option  
green)

Digit Size  
14mm 0.56"

Full Scale Range  
-19999 to +99999

Scaleable to required  
engineering unit range

Decimal Point  
Programmed from front  
panel

#### SUPPLY:

Power Supply Voltage  
95 to 265 Volt AC  $\pm 10\%$   
50/60 Hz  
Option:  
11 to 30VDC

Power Required  
8 Watts Max

Excitation  
24VDC up to 100mA

#### OUTPUTS:

(Optional plug-in modules)  
4-20mA into 0 to 500Ohms  
0-10V into loads>600Ohms  
-5 to +5V into loads>600Ohms  
Fully isolated from input and  
power supply – 250 Volt AC.  
Fully scalable with digital  
precision.  
Forward and reverse action  
possible  
Alarm Outputs  
(Optional plug-in modules)  
2 Alarms rated 5A 250VAC, SPST  
4 Alarms rated 5A 250VAC, SPST  
Adjustable hysteresis  
Energise or de-energise on trip  
Normally open or normally closed

#### Serial Data Outputs

(Optional plug-in modules)  
RS232 1200 baud output only  
RS422 1200 baud output only  
RS485 Addressable  
DeviceNet Addressable  
Modbus Addressable  
Profibus DP Addressable

#### GENERAL:

Accuracy  
Rate:  $\pm 0.01\%$  of input @ 25°C  
 $\pm 100\text{ppm}/^\circ\text{C}$

Operating Temperature Range  
0 to +50°C

Storage Temperature Range  
-10 to +70°C

Operating/Storage  
Humidity Range  
0 to 95% RH non-condensing

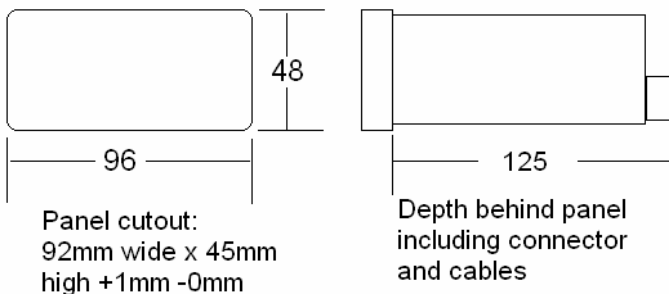
Mounting  
Panel mounting

Panel Cut-out  
92mm x 45mm

Protection Level  
Fascia Panel to IP65 std,  
IP67 with optional SPC4 Cover

Weight (approx)  
IDL-INT-C 300 gms  
IDL-INT-F 300 gms  
for basic model

### MECHANICAL DETAILS



### TERMINATION DETAILS

#### Terminal

- 1 Input Common
- 2 Input Signal 1
- 3 Input Signal 2
- 4 Input Excitation +ve
- 5 Unused
- 6 Unused
- 7 Remote Common
- 8 Unused
- 9 Remote Peak/Valley
- 10 Remote Reset
- 11 Earth
- 12 Neutral or -ve
- 13 Line or +ve

These terminals are only present  
when option selected

- 14 Analogue o/p -ve
- 15 Analogue o/p +ve
- 16 Serial Output Signal+
- 17 Serial Output Signal -
- 18 Serial Output Common
- 19 Enable
- 20 Alarm 1
- 21 Alarm 1
- 22 Alarm 2
- 23 Alarm 2
- 24 Alarm 3
- 25 Alarm 3
- 26 Alarm 4
- 27 Alarm 4

### ORDERING DETAILS

- a) Display Colour – Standard is RED – optional GREEN available
- b) Give details of power supply, i.e. 240 Volt AC
- c) Specify input type and range, i.e. 0 to 10KHz
- d) Specify display ranging required, i.e. 0 to 10000

#### Options that may be required:

- e) Analogue output type and Range, i.e. 4 to 20mA
- f) Serial ASCII data output type, i.e. RS485
- g) Alarm relay outputs, i.e. 2 SPST relays