

FEATURES

- ❖ Excites upto 8 Load Cells
- ❖ High Sensitivity : ± 1 Count / μV
- ❖ High Stability 18 bit Conversion
- ❖ Load Cell Non-Linearities Compensated
- ❖ Battery backed 'TARE' facility
- ❖ Programmable Software Filter
- ❖ 5-digit LED display
- ❖ Two Potential free Alarm Contacts
- ❖ Optional - mA / V Output (Isolated)
- ❖ Optional - MODBUS connectivity to DCS/ PLC/ SCADA



About *lc-ind*....

lc-ind is a constituent of the 'NewTon' Series of Weighing Instruments designed for 'Load Cell' Applications. LC-Ind is a programmable Instrument with application specific hardware structure for Weight and Force measurements, in harsh Industrial environments. LC-Ind has the state of the art 18 bit sigma delta A/D convertor, with Unique Compensating technique to overcome the errors due to the ratiometric nature of the signal with excitation. The net result is excellent long-term and temperature performance, unaffected by variations in excitation supply or ambient temperature.

lc-ind features a short circuit protected four terminal Load Cell Excitation power supply capable

of powering multiple Load Cells in BIN/SILO weighing applications. LC-Ind supports two alarm contacts.

lc-ind has many user configurable Software features focussed towards weighing application. Password protected 'Tare', One touch gross weight indication, multiple working modes, tamper proof Software Calibration, Load Cell non-linearity compensation are some of the Specialities of the Instrument. LC-Ind has Optional Isolated Analog Output and MOD-BUS Communication port.

lc-ind can be seamlessly integrated with the Host Systems like DCS, PLC or SCADA through the MOD-BUS port, so that the weight data can be retrived and presented by the MMI Software.

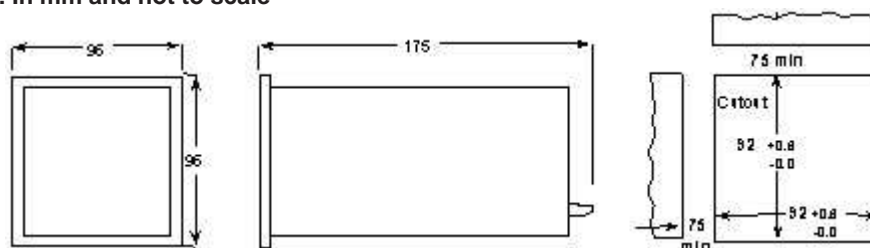
GENERAL SPECIFICATIONS

Power Supply : 90 - 270 V AC / 50 to 60 Hz(15 W).
Operating Temp. : 0 to 55 °C.
Storage Temp. : 0 to 70 °C.

Humidity : 0-90% (Non Condensing).
Mounting : Flush Panel
Bezel : 96 (W) X 96 (H)

DIMENSIONS : In mm and not to scale

Noryl enclosure



PERFORMANCE SPECIFICATIONS

INPUT

Basic FS Range	: 35 mV (3.5 mV /V)
Indication Sensitivity ¹	: ± 1 count / μ V
Indication Resolution	: 99,999 counts
ADC Resolution	: 18 bit
Conversion Speed	: 200 msec
Linearity	: ± 0.005 % of Basic FS
Filter	: 0 - 100 Sec
Temp Coeff: Zero	: ± 20 PPM / °C
Span	: ± 20 PPM / °C

DISPLAY

Digits	: 5 digit Dual display
Size	: 14.2 mm, 8 mm
Scalability	: - 9999 to +99999 Units
Decimal Point	: Configurable upto four decimal places.

LOAD CELL EXCITATION ²

Excitation Type	: 4 wire with Source & Sense Terminals.
Capacity	: Powers upto 8 Load Cells of Resistance $\geq 300 \Omega$.
Excitation Protection	: 10 V DC @ 250 mA. : Short Circuit Protected.

Note 1 : LSD Stability.

ALARMS

Types	: Hi/Lo Programmable thro' Keypad.
Output	: Two Change Over relay Contacts 250 V AC, 5 Amp. (Non-inductive).

RETRANSMISSION (Optional)

Output	: 0-20mA / 4-20mA / 0-5 V / 1-5V / 0-10 V Selectable through front panel Keypad.
Accuracy	: $\pm 0.05\%$ of FS (D/A accuracy only).
Load	: 850 Ω (max) for mA / 1K Ω (min) for V

COMMUNICATION (Optional)

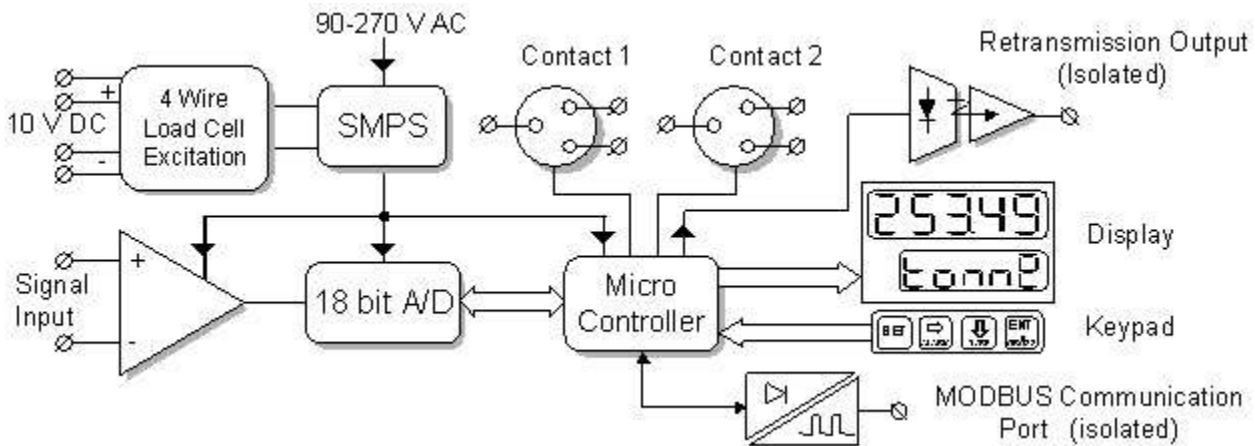
RS - 485 / 232	: MODBUS RTU-SLAVE or MODBUS ASCII-SLAVE
Baud Rate	: 1200 / 2400 / 4800 / 9600 / 19200 Selectable thro' front panel keypad.
Addressing	: 1 to 247
Compatibility	: WONDERWARE (INTOUCH Ver 7.1) INTELUCTION (FIX 32 / I-FIX)

CABLE REQUIREMENT (For Load Cell Excitation & Signal)

Load Cell	: 0.2 mm ² / 24 strands.
Cable	: 6 Core Shielded Cable.

Note 2 : To power Load Cells in hazardous areas through Barrier, Contact Factory.

FUNCTIONAL SCHEMATIC



ORDERING INFORMATION

Retransmission Output	Commn. Option	MODEL Code
Not provided	Not provided	LC IND - NN
Provided	Not provided	LC IND - TN

Retransmission Output	Commn. Option	MODEL Code
Provided	RS - 485	LC IND - T4
Provided	RS - 232	LC IND - T 2

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Specifications are subject to change without any notice due to continuous development.