



PR486E LOAD CELL AMPLIFIER

Ethernet

MODBUS® TCP/IP

Features

- Ethernet 10/100BaseT communications with PLC's and computers.
- Standardised Gain enabling replacement without the need for vessel emptying or re-calibration.
- Adjustable filtering, down to 0.2Hz, for elimination of the effects of mechanical vibration.
- DIN Rail or wall mount options.
- Security code protected calibration.
- 2 trip relay outputs

Description

The PR486E connects with a single set of 1 to 4 strain gauge load cells. It supplies 10V DC excitation and amplifies and conditions the resultant return signal. From this signal and from stored control and calibration data it generates a Gross/Net Weight signal for display and for transmission to PLCs and computers via its 10/100BaseT fast Ethernet connection.

Powerful ‘System On Chip’ technology provides outstanding levels of accuracy and stability combined with drift compensation.

Technical Data

Model No:

PR486E AC powered.
Add suffix ‘D’ for DC powered option ie PR486E-D

Power Supply:

Universal fused power supply
85-264VAC, or 12-36VDC (PR486E-D)

Load Cell Excitation:

10V DC @ 125mA max, 1 to 4 x 350 ohm load cells may be connected in parallel, 4 or 6 wire for volt drop compensation in long cables.

Input Range:

0-20mv min
0-2.5v max

Filter:

0.2 to 20Hz active low pass.

Resolution:

Up to 65,000 divisions

Ethernet Connection:

RJ45 connector, 10/100 BaseT
Protocol: MODBUS® TCP/IP

Trip Relay Outputs:

240VAC or 30VDC maximum, 5A rated

Enclosure:

DIN rail mounting IP30 protection
140mm wide x 128mm high x 60mm
Optional IP65 enclosure
180 x 180 x 75mm

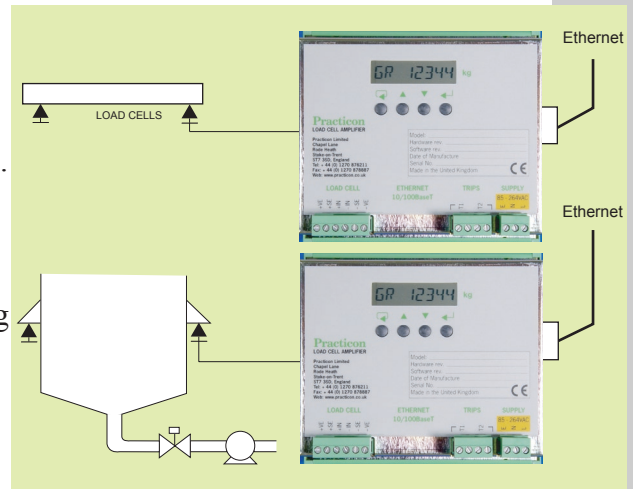
Environment:

Operate 0-50°C, Storage -40 to 80°C
20-80% RH, non-condensing.

Calibration

Calibration adjustments are performed by means of the four push-buttons in conjunction with the LCD display. Access to calibration data is pass-number protected.

Each PR486 is factory calibrated to have the same precise input range. This facilitates unit replacement, without the need for vessel emptying or recalibration, by entry of zero and gain coefficients.



The weigher may be calibrated using a single test weight; often of considerably lower weight than the weigher capacity.

The data parameters and procedures are:

ZR ZERO. Operate ENTER then ▼ and ENTER again to zero the weigher.

CA CALIBRATION. Load known test weight, operate ENTER, use ▲, ▼, & ◀ keys to enter test weight value and ENTER again to complete the calibration.

CC CALIBRATION COUNTER. Indicates the number of calibrations completed to date.

In addition to the conventional method, calibration can be achieved by entry of the precise sensitivity and capacity figures from the load cells.

Preset Trip Outputs

Two preset trip relay outputs are provided. They have separate level, deadband and high/low sense settings.

Ethernet Communications

The following weigh data is accessible:

| ETHERNET MASTER INPUTS | OUTPUTS |
|----------------------------------|-----------------|
| Gross/Net Weights & 2 Trip Flags | Zero/Tare Flags |

MODBUS®/TCP communications protocol is supported for direct connection to a MODBUS/TCP master host system.

Alternatively, a simple ASCII protocol allows easy implementation within any host PC/PLC system.

A ‘Com Object’ software module is available for use with PC host systems, this enables direct access from the users application.

Supplied by:



Practicon Limited

Chapel Lane, Rode Heath, Stoke On Trent, ST7 3SD, UK
Tel: +44 (0)1270 876211 Fax: +44(0)1270 878887
Email: sales@practicon.co.uk Website: www.practicon.co.uk