

PR486S LOAD CELL AMPLIFIER

## Serial Output

RS232 / RS485

### Features

- Industry standard RS232 or RS485 Serial Communications
- 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.
- Preset Trip Outputs

## Description

The PR486S 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 Weight signal for display and for transmission to PLCs and computers via its RS232/485 Serial connection.

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

## Technical Data

### Model No:

PR486S AC powered.  
Add suffix 'D' for DC powered option ie PR486S-D

### Power Supply:

Universal fused power supply  
85-264VAC, or 10-36VDC (PR486S-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

### Serial Connection:

RS232 or RS485 (parameter setting)  
Protocol: ASCII

### Trip Relay Outputs:

240V AC or 30V DC maximum 5A rated

### Enclosure:

DIN rail mounting IP30 protection  
140mm wide x 128mm high x 60mm  
Optional IP66 wall mounting 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

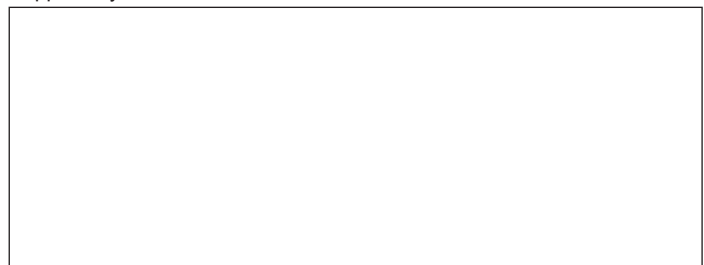
Two preset trip relay outputs are provided. They have separate level, deadband and high/low settings.

## Serial Communications

The communications protocol uses simple ASCII coded messages and is designed to be easier to implement in the host system.

When set for RS485 Multidrop operation, up to 30 PR486S units may be linked via a single twisted pair cable up to 1000 metres end-to-end distance without the need for repeaters.

Supplied by:



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