# P610

# **ADVANCED IP67** STAINLESS STEEL INDUSTRIAL **WEIGHING INDICATOR**



### **GENERAL FEATURES**

- Wide angle LCD display with multi-coloured back light, 22mm main digits and 8mm alphanumeric auxiliary digits.
- Desk, wall and panel mount versions
- Up to 999999d display resolution
- Up to 800 conversions per second
- OIML approved to 10000d
- · Dedicated navigation keys provide easy operation
- High sensitivity (to 0.05 μV/d)
- · Linearity correction
- · Gravity Adjustment
- · Keypad locking
- Mains and 12-28V DC versions
- · Dynamic weighing
- Up to 8x 350Ω load cells
- 2x RS-232C 1x USB and 1x RS485 data port standard
- · Connectivity to remote displays and printers
- Programmable print format
- · Choice of 6 languages for printing
- Built in real time clock
- · User setable password access
- · Stainless steel housing to IP67

### **BASIC WEIGHING**

- Multiple tare
- Auto tare

### **APPLICATIONS**

- · Process and industrial weighing (silos, tanks, hoppers, etc.)
- Food processing and hygienic applications
- · Label printing with barcode
- · General harsh conditions weighing
- · Livestock and dynamic weighing

### SYSTEM INTEGRATION

- Fieldbus connectivity (optional\*) with Profibus, Profinet, CANopen, Ethernet TCP/IP, EtherNet/IP, EtherCAT, CC-Link, Powerlink Modbus RTU / TCP and Analogue outputs
- 9 different types of output (dependant on selected application) are configurable with optional Digital I/O







Accupoint weigh module

# ... Azure Signature Series!

The PT610 is an advanced, high quality general purpose weighing indicator for industry in a durable IP67 stainless steel housing. Ideal for platform, truck and hopper scales among other applications and is available with a wide range of options.

The PT610 is approved by Weights & Measures Authorities for use in Accuracy Class III applications with 10000 intervals in accordance with OIML R76.

Weighing, and Dynamic weighing for animals and fluctuating loads are standard as is printing which is selectable from 6 languages.

A wide range of options is available for integration by Fieldbus connectivity, desk, wall or panel mounting and digital I/O.

Easy, practical operation via navigation keys with 6 large 22mm digits, 16 alphanumeric characters 8mm high and wide viewing angle, multi-colour backlit LCD display.

The PT610 is powered by AC power with integral mains cable. A version is available for powering from 12-28VDC

\*The PT610DM now comes standard with on board Ethernet TCP/IP and Modbus.











### PT610 SPECIFICATIONS

ACCURACY OIML R76 Class III 10000. Single range, multi-range, multi-interval operation

DISPLAY Wide view backlit LCD with 22mm digit height, 8mm alphnumerics and 3 back light colours RESOLUTION Max. Displayed 999999 divn., internal 16000000, 24 bit Delta Sigma ADC, up to 800 conv/s

CAPACITY & UNITS DISPLAY Up to 300 000kg, Units g, kg, oz, lb Metric/Imperial switchable

DISPLAY ANNUNCIATORS Gross, net, motion, centre of zero, units

KEYPAD 11 key (on/off, Tare/Clear, Zero, unit swap, 10x resolution, navigation and print)

EXCITATION 5VDC 125mA, up to  $8x 350\Omega$  or  $16x 700\Omega$  load cells, 4 or 6 wire, maximum 1000 m/mm<sup>2</sup>

INPUT VOLTAGE RANGE AND

**SENSITIVITY** 

-5mV to +19mV. Minimum 0.05  $\mu$ V/division (0.4  $\mu$ V/division approved)

ZERO ADJUSTMENT INPUT RANGE -5mV to +19mV

OPERATING ENVIRONMENT
ENCLOSURE AND DIMENSIONS

-15°C to +55°C; max. 90% RH (80% RH, -10~40°C approved), non-condensing. IP67 sealing. Stainless steel, IP67 protected. Wall type: 260x200x65, Desk type: 250x180x85, weight 2.3kg

POWER SUPPLY Integral cable, 100-240 VAC (100-125VAC with USA plug), 50-60 Hz. 12VDC (12-28)

configurable.

**FEATURES** 

CALIBRATION Calibration can be performed with or without load cell non-linearity correction.

Calibration with test weights, Electronic calibration without test weights,

Temporary zero calibration, Zero adjustment, Gain adjustment

DIGITAL FILTER Adaptive digital filter adjustable in 5 steps for standard weighing,

Programmable dynamic (animal) weighing filter.

WEIGHING FUNCTIONS

Taring, zeroing, auto zero tracking, motion detection, auto zero at power up, tare status

save at power off, increased resolution, automatic tare and clear, temporary gross

indication, unit change.

STANDARD APPLICATIONS Labelling, relay setpoints, functional digital outputs, livestock weighing, fieldbus

interfacing and high resolution scales.

APPLICATION MEMORY Standard Memory to save limit values of your industrial weighing.

Memory size is 500 item records.

DYNAMIC (ANIMAL WEIGHING)

COMMUNICATION

RS-232C

2x 3 wire ports. Opto-isolated. 1200 to 57600 baud, 7/8-E/O/N-1.

RS-485 1200 to 57600 baud, 7/8-E/O/N-1. Up to 31 stations. USB Standard USB for Mini-B cable (internal on PCB).

FIELDBUS (option required) Modbus, Profibus, Profinet, Ethernet TCP/IP, CANopen, EtherNET/IP, EtherCAT, CC-Link,

Supported by smart dynamic weighing algorithms

Powerlink.

Note: Ethernet TCP/IP 10/100Mb/s Full Duplex and Modbus are now standard on the

PT610DM

DATA OUTPUT Demand (BSI), Continuous and Fast Continuous, Fieldbus (option dependent).

PRINTING/WEIGH TICKET

TICKET FORMAT Programmable for different weighing modes. Format may include Date, Time, Ticket No,

Gross, Tare and Net weights. Ticket weighing number can be Preset.

DATE FORMAT Programmable as dd.mm.yyyy, mm.dd.yyyy or yyyy.mm.dd

PRINT LANGUAGES English, German, French, Italian, Spanish, Turkish









### **MODELS AVAILABLE**

Model	Features	Part Numbers
PT610DM	Standard PT610 Desk Mount – The desk mount has a sloping panel, will also wall mount with cables at the rear.	EP610DM00USXXX, EP610DM00UKXXX, EP610DM00EUXXX, EP610DM00AUXXX
PT610WM	Standard PT610 Wall Mount – The wall mount has a flat panel with cables exiting in the front.	EP610WM00USXXX, EP610WM00UKXXX, EP610WM00EUXXX, EP610WM00AUXXX
PT610PM	Standard PT610 Panel Mount	EP610PM00USXXX, EP610PM00UKXXX, EP610PM00EUXXX, EP610PM00AUXXX

## Options\*\*

MOUNTING Column mount kit, Wall mount kit, 2D Swivelling wall mount kit

**ALIBI MEMORY** 999999 records

MODBUS (RTU) (Software option on SD Card)

DIGITAL INPUT/OUTPUT Optoisolated 4 digital input, 12 to 28 VDC, 10mA / 5 relay contacts, 250 VAC or 30 VDC, 0.2A

ANALOGUE OUTPUT\* 0-5 VDC, 0-10 VDC, >10 k $\Omega$  / 4-20mA, 0-20mA, <500  $\Omega$ . 60000 steps, up to 300m.

FIELDBUS\* (each a separate option) Profibus, Profinet, Ethernet TCP/IP (incl. Modbus, TCP), CANopen, EtherNET/IP, EtherCAT, CC-

Link, Powerlink.









<sup>\*</sup> Only one option of Fieldbus or Analogue output can be fitted per indicator.

<sup>\*\*</sup>The full range of available options are listed on the PT web site.

	Desk Mount	PT610DM	PT620DM	PT630DM	
Features\Models	Wall Mount	PT610WM	PT620WM	PT630WM	
	Panel Mount	PT610PM	PT620PM	PT630PM	
Touch Free IR Keys (2 Keys)		n/a	n/a	Yes	
Ethernet (TCP/IP) interface 10/100Mb/s full duplex		Note 3	n/a		
Modbus (RTU /TCP)		Note 3	n/a	0	
PROFIBUS DPV1 interface + 4 Input/5 Relay Output		01	n/a	01	
PROFINET interface + 4 Input/5 Relay Output					
Ethernet/IP interface + 4 Input/5 Relay Output					
CANopen interface + 4 Input/5 Relay Output					
EtherCAT interface + 4 Input/5 Relay Output					
CC-Link interface + 4 Input/5 Relay Output					
Powerlink interface + 4 Input/5 Relay Out	put				
2 Platform weighing		n/a	n/a	0	
BSI data interface (BSI-PRO command set)					
Classifying by weight					
Check-weighing					
Filling					
Dynamic/Animal weighing			Yes		
Piece Counting					
Weight Totalling		n/a			
Piece Totalling					
Pre-Tare entry					
Pre-Tare value storage (500 values)					
ID data (ID1, 500 records for stored items)					
ID Data (ID2, second set 500 records)					
Average Piece Weight storage for countin	ıg (500 values)				
Alibi Memory (999999 records)		0			
Dynamic/Unstable load weighing					
Setpoint storage (500 sets)		Yes			
Unit selection (g, kg, t, lb, oz)					
Unit Switching (kg/lb, g/oz)					

O = Option, O1 = Only one Option can be installed at a time, 2 = Third party barcod	e software required	ı.
---	---------------------	----

	Desk Mount	PT610DM	PT620DM	PT630DM	
Features\Models	Wall Mount	PT610WM	PT620WM	PT630WM	
	Panel Mount	PT610PM	PT620PM	PT630PM	
Docket Printing					
Label Printing (with Barcode <sup>2</sup> )					
Auto-zero tracking and auto-zero at power-up					
Motion detection					
Adaptive digital filter for faster measuring					
Electronic calibration (vCal) without test weights		Yes			
Electronic calibration (vCal) over field bus					
Zeroing and Taring via fieldbus					
Zero and Span calibrations over field bus					
Zero adjustment without span change					
Span adjustment with test weights					
Span adjustment without unloading the scale					
3 point calibration (linearity correction)					
Programming by PT AzCom PC software					
8 load cells 350 $\Omega$ or 16 load cells 700 $\Omega$					
100 - 240 VAC					
12 to 28 VDC power supply range					
1 000 to 999 999 display resolution					
High internal resolution up to 16 000 000 counts					
Up to 800 conversion per second					
RS-232C Serial interface					
RS-232C Second Serial interface					
RS-485 Serial interface					
USB Serial Interface					
BSI data interface (BSI-BASE command set)					
Continuous data output					
Fast Continuous data output					
4 Digital Inputs, 5 relay outputs (DI/O)			01		
Analogue output (4–20, 0–20mA,0–5, 0–10VDC)+DI/O					

<sup>3 =</sup> Standard in PT610DM, optional in PT610WM and PT610PM. n/a = Not Available





