

## Product Specifications

Two to Four Idler Belt Scales

# ECONOWEIGH®



Process Automation manufactures a range of high accuracy conveyor belt scales to suit various applications including ***weighing where nobody else can.***

Using the advanced UniproIV microprocessor based weighing transmitter to compute rate (T/H) and totalized tons along with instantaneous belt load (kg/m) and speed (m/min) indications. The descriptive and user-friendly display interface allows for easy operation without referring to the manual.

### Applications:

- Up to 2400mm belt width
- Heavy duty applications
- Varying belt load applications
- Economic Weighing

PT500 - high accuracy belt speed sensor. Rugged design for extended life under harsh mining conditions.





### Accuracy & Maintenance

The Econoweigh range of scales continue to perform with exceptional results in harsh mining environments. Requiring little or no maintenance at the same time maintaining accuracy over extended periods of time.

Econoweigh scales are the first choice at mine sites where cost and performance is a major consideration.

### Calibration

Each weigh frame is supplied with an on-board test weight tray to facilitate calibration checks using static calibration weights with the belt running. Dynamic effects are taken into account during calibration.

The weighing transmitter's user-friendly calibration menu provides *As-Found error* and correction tracking.

### PT500 Belt Speed Sensor

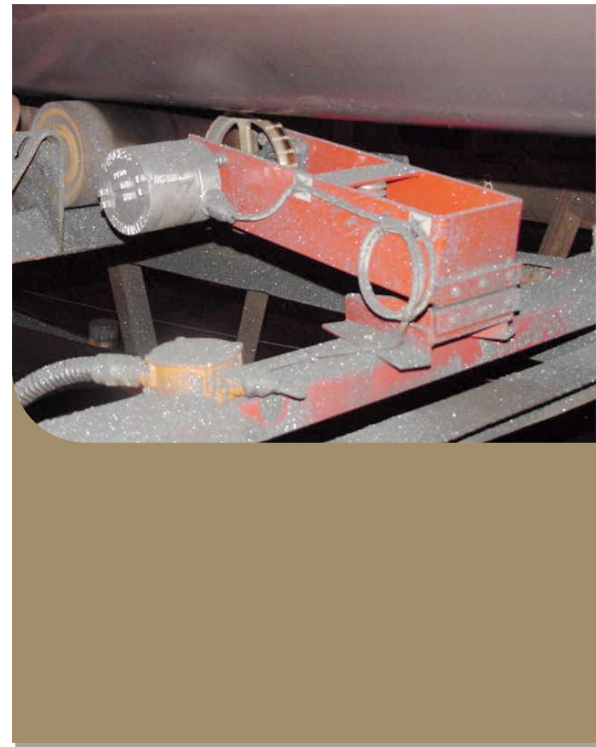
Because the belt speed measurement is just as important as the mass, we offer a high-resolution digital encoder. The rugged design ensures reliable operation in heavy duty applications. The IP65 cast aluminium enclosure seals the electronics from the harsh environment.

A high wear resistant wheel is in contact with the underside of the feed belt for true material velocity measurement. The drive unit is also equipped with a self aligning hinge to follow belt direction, belt lift and sag.

### Durability

Our scales are installed in some of the toughest mining applications around the world.

Ideal for applications where low maintenance equipment is essential for continued plant uptime.



## ECONOWEIGH®

### Weighbridge

Construction	Single, Two & Four weigh idler, approach, retreat weigh frames of welded mild steel with maintenance-free pivots. <sup>(1)</sup>
Mounting	Stringer mounted, low profile, mounts in place of standard conveyor idlers. Belt widths from 450mm to 2400mm. <sup>(2)</sup>
Idlers	For best accuracy weigh class idlers are recommended on the weigh bridge as well as two or three before and after the weigh area.
Accuracy	≤ +/-0,5% On approved installations.

### UNIPRO<sup>IV</sup> Weighing Transmitter

Mounting	Field / Wall mount in single or double door enclosure.
Construction	Powder coated mild steel enclosure. <sup>(1)</sup>
Protection	IP54 weather proof enclosure. <sup>(3)</sup>
Power Supply	<ul style="list-style-type: none"> <li>- 90 to 250Vac (Auto-switch mode)</li> <li>- 50/60Hz</li> <li>- 50VA</li> </ul>
Outputs <sup>(4)</sup>	<ul style="list-style-type: none"> <li>- Isolated 0/4 - 20 mA (1kΩ max.), Programmable for either Rate (T/H) or Control.</li> <li>- 1 x Volt free relay contact. Rating 0.5 A at max. 24 Vdc Programmable for either remote Totalisation or Sampler control.</li> </ul>
Serial Communications options	<ul style="list-style-type: none"> <li>- ProfiBus DP / PA</li> <li>- ModBus RTU</li> <li>- DeviceNet</li> <li>- Allen Bradley Remote I/O</li> <li>- ControlNet</li> <li>- Ethernet (Ethernet/IP &amp; Modbus TCP/IP)</li> </ul>
Mass	10kg

1. Other materials e.g. Stainless steel upon request.
2. Special mounting on request.
3. Other e.g. IP65 on request.
4. Additional digital & analogue I/O available on request.



## ECONOWEIGH®

### Load Sensor

Mounting Mounted under tension, providing immunity to load shifts. Optional Protected against overload and shock.

Quantity & type Single, Stainless Steel precision beam type load cell

Protection IP68 Hermetically sealed

Excitation 5Vdc  $\pm 5\%$  (From UNIPRO<sup>IV</sup>)

Output 2mV/V  $\pm 0.1\%$

Overload Safe 150%, Ultimate 200%

### Speed Sensor

Construction Cast Aluminium housing with high wear-resistant drive wheel

Type High accuracy digital encoder (500 pulses/Rev)

Mounting Non-driven pulley stub shaft or via drive wheel in contact with belt

Protection IP65

Excitation 12-30Vdc (From UNIPRO<sup>IV</sup>)

Low Speed range 0.1 to 25m/min (0.0016 to 0.417m/sec)

Standard Speed range 25 to 600m/min (0.417 to 10m/sec)

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