


**UNISYSTEM** has developed a series of very price favorable Exi components for weighing equipment in hazardous areas. The weight indicator U2379 also has a very fine general type approval certificate according to WELMEC 2.4 for OIML class , 6,000 intervals, multiple range etc.. This means, that any EEx scale, with the same performance as the best available standard scales, may be built, certified and verified. The indicator has the same functions as our standard U237 series indicators. However the load cell excitation is only 5V. Up to six 400 ohm load cells may be used and if the internal backlight of the display is removed, ten load cells. Compared with the standard solution, to have the indicator in e.g. an Exd or Exp box and feed the load cells via zener barriers, our solutions is much more accurate and price favorable.

**Weight indicator U2379.**

Type Approval Certificate: OIML class .

6,000 intervals,  $\geq 0.6\mu\text{V}/\text{interval}$  and  $p_i = 0.4$ .

Universal bidirectional RS232 interface, programmable to control printer or to send internal data (e.g. stability, multiple range) to system.



Software calibration with many functions and features. Excellent for unstable signals, very high resolution, fast or automatic measurements.

Many options e.g.

Adjustable signal filter for fast dynamic measurements.

Setpoints, 0-20mA output, RS232, remote displays, printers etc. via signal zener barriers and interface in the power supply U2387 to the safe area.

IP67 Stainless box, U13771.

More information in our document B01840.

U2379 may also be used to measure very accurate e.g. pressure, force, resistance or temperature with Pt100 transducer.

**EEx Power supplies:**

**U2386.** EEx ib IIC.

Rechargeable battery power supply. Is used inside the EEx area but must be charged in safe area. For continuous use, two may be exchanged. Discharge protection switch.

6.2V, 150mA.

Lower current available.

Discharge time max 16 hours.

Dimensions: 222x125x81mm.



**U2394.** EExd [ib] IIB.

230VAC. Is used inside the EEx area, normally mounted fixed. Delivered without 230V connector.

6.2V, 150mA.

Dimensions: 222x125x81mm.



**U2387.** [EEx ib] IIC.

230VAC. Is used in the safe area. As option there are all interface signals, such as RS232, setpoints, 0 - 20mA and signals to remote displays for use in safe area.

6.2V, 150mA.

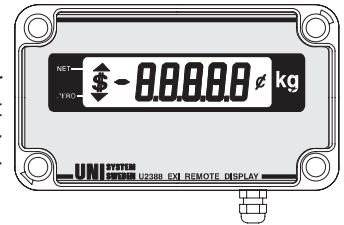
Dimensions:380x190x130mm.



**Remote display.**

**U2388.** EEx ib IIC

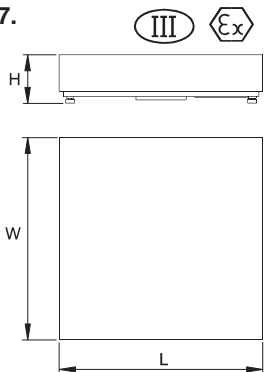
With backlight, but the power may be limited to one backlight only. Information of remote display in safe area in our document B01680.



**Standard certified Scales with U2387.**

**Bench scales.**

The load receptors are made of stainless steel and aluminium and very sturdy. Aluminium load cells. Not certified models are delivered with one additional lower range.



**LxWxH** 261x344x81mm. Weight 6kg.

**U80510** 15/0.005 6/0.002 kg

**U80512** 40/0.01 20/0.005 kg

**LxWxH** 344x411x86mm. Weight 11kg

**U80523** 40/0.01 20/0.005 kg

**U80524** 80/0.02 40/0.01 kg

**LxWxH** 455x455x108mm. Weight 18kg.

**U80530** 75/0.05 60/0.02 30/0.01 kg

**U80531** 150/0.05 60/0.02 kg

**LxWxh** 455x455x136mm. Weight 29kg.

**U80550** 375/0.2 300/0.1 150/0.05 kg

**LxWxH** 455x600x108mm. Weight 22kg.

**U80540** 75/0.05 60/0.02 30/0.01 kg

**U80541** 150/0.05 60/0.02

**LxWxH** 515x682x136mm. Weight 44kg.

**U80650** 375/0.2 300/0.1 150/0.05 kg

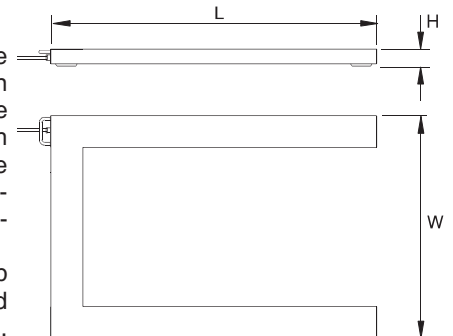


U8051 with U2394 EExd [ib] IIB power supply.

**Pallet scales.**

Our pallet scales are very sturdy built in order to keep the accuracy at high loads. There are many models in order to meet all demands.

Options: wheels, top plates, improved humidity protection, other calibrations.



**LxWxH** 1250x858x74mm. 3 load cells. Weight 29kg.

**U80570** 750/0.5 600/0.2 300/0.1 kg

**U80571** 1500/0.5 600/0.2 kg

**LxWxH** 1250x858x74mm. 4 load cells. Weight 31kg.

**U80580** 750/0.5 600/0.2 300/0.1 kg

**U80581** 1500/0.5 600/0.2 kg

**LxWxH** 1250x858x74mm. 5 load cells E-shaped. Weight 40kg

**U80590** 3000/1 1500/0.5 kg

**LxWxH** 1220x1000x65mm. 4 load cells. Weight 40kg.

**U80700** 1500/0.5 600/0.2 kg

**LxWxH** 1250x850x74mm. 3 load cells. Stainless. Weight 29kg

**U80600** 750/0.5 600/0.2 300/0.1 kg

**U80601** 1500/0.6 600/0.2 kg

**LxWxH** 1250x850x74mm. 4 load cells. Stainless. Weight 31kg

**U80610** 750/0.5 600/0.2 300/0.1 kg

**U80611** 1500/0.5 600/0.2 kg

**U80612** 3000/1 1500/0.5 kg

**Floor scales.**

**LxWxH** 1250x850x77mm. Stainless. Weight 67kg.

**U80620** 750/0.5 600/0.2 300/0.1 kg

**U80621** 1500/0.5 600/0.2 kg

**U80622** 3000/1 1500/0.5 kg

**LxWxH** 1565x1250x77mm. Stainless. Weight 109kg.

**U80630** 750/0.5 600/0.2 300/0.1 kg

**U80631** 1500/0.5 600/0.2 kg

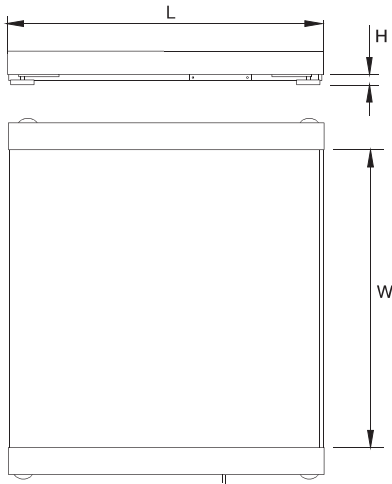
**Low built scales.**

These load receptors are very sturdy built in order to keep the accuracy at high loads.

Models U8065 to U8067 are extremely low in order to facilitate the manual handling or heavy carriages.

All are available galvanized or in stainless steel.

As option there are various ramps.



**LxWxH** 1270x890x29mm. Weight 145kg.

**U80650** 750/0.5 600/0.2 300/0.1 kg

**LxWxH** 1270x890x29mm. Stainless. Weight 145kg.

**U80660** 750/0.5 600/0.2 300/0.1 kg

**LxWxH** 1330x970x32mm. Stainless. Weight 262kg.

**U80670** 750/0.5 600/0.2 300/0.1 kg

**U80671** 1500/0.5 600/0.2 kg

**LxWxH** 900x1020x49mm. Weight 79kg.

**U80680** 750/0.5 600/0.2 300/0.1 kg

**U80681** 1500/0.5 600/0.2 kg

**LxWxH** 900x1020x49mm. Stainless. Weight 79kg.

**U80690** 750/0.5 600/0.2 300/0.1 kg

**U80691** 1500/0.5 600/0.2 kg

**LxWxH** 1400x1020x49mm. Weight 99kg.

**U80710** 750/0.5 600/0.2 300/0.1 kg

**U80711** 1500/0.5 600/0.2 kg

**U80712** 3000/1 1500/0.5 kg

**LxWxH** 1400x1020x49mm. Stainless. Weight 99kg.

**U80720** 750/0.5 600/0.2 300/0.1 kg

**U80721** 1500/0.5 600/0.2 kg

**U80722** 3000/1 1500/0.5 kg



U8072 with optional ramp.

**Other models and calibrations.**

On demand we can make any load receptor and calibrate it to all needs. However for certified scales the ranges are somewhat more limited. The most accurate certified scales, we can achieve today is according to the following.

**Optional certified ranges with higher accuracy.**

Models with 3 load cells. H = hermetically sealed load cell.

**U8260** 1000/0.5 600/0.2 300/0.1 kg H

**U8261** 1330/0.5 800/0.2 400/0.1 kg H

**U8262** 1660/0.5 1000/0.2 500/0.1 kg H

**U8263** 1750/0.5 1200/0.2 600/0.1 kg H

Models with 4 load cells. (Standard.)

**U8264** 1000/0.5 600/0.2 300/0.1 kg H

**U8265** 1330/0.5 800/0.2 400/0.1 kg H

**U8266** 1500/0.5 1000/0.2 500/0.1 kg H

**U8267** 1500/0.5 1200/0.2 600/0.1 kg H

**U8268** 2000/1 1500/0.5 600/0.2 kg H

**U8269** 2660/1 2000/0.5 800/0.2 kg H

**U8270** 3330/1 2500/0.5 1000/0.2 kg H

**U8271** 3850/1 3000/0.5 1200/0.2 kg H

**U8272** 5000/2 3000/1 1500/0.5 kg H

**U8273** 6150/2 4000/1 2000/0.5 kg H

**Pallet Truck Scales.**

Unisystem has a very long experience of scales built in trucks and have delivered thousands. The accuracy is extremely good in spite of a moderate price. There are class III certified models with dual range also in Ex.

The EEx version has a water level for tilt indication with a larger ring within which the bubble must be.



**Verified III model.**

**U8009** EEx ib IIC T4.  
1500/0.5 600/0.2 kg

U1307 with optional stainless IP67 box, U13771, for the indicator.

**Not verified model.**

**U1307** EEx ib IIC T4  
1500/0.5 600/0.2 300/0.1kg  
Weight 106kg.

**Load Cells.**

Unisystem import most load cells from Revere-Transducers and Tedeá Huntleigh. We supply load cells between 1kg and 100 ton up to certified accuracy class C6 (6000 intervals). We have also tested some low price models from smaller manufacturers, which we sell to less critical applications.

**Mounts for Load Cells.**

Most important for accuracy of multiple load cell scales is the mount (foot) of the load cell. We make special stainless rubber feet in various hardness for standard shearbeams. We also make stainless rocker mounts for e.g. Tedeá-Huntleigh's T-mount, Revere-Transducers' and HBM's standard shearbeams or standard shear beams with 13.5mm hole and thread, all according to the Welmec 2.4 Guide for modules. For threaded tension load cells, e.g. S-beams, we have stainless end pieces, which give a much better accuracy and strength than usually used rod end bearings.

**If you have a difficult measurement problem, contact us. We have resources and knowledge to solve it.**