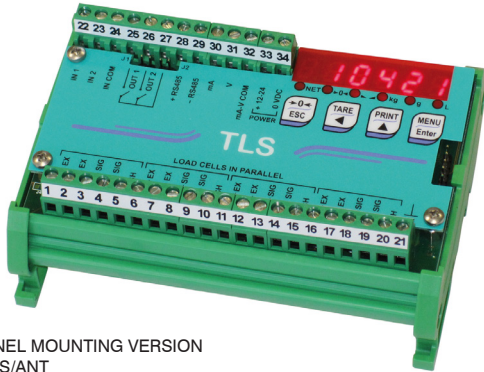




MODBUS RTU



BACK PANEL MOUNTING VERSION
TLS - TLS/ANT



IP67 VERSION BOX (on request)
TLS/IP67+TAST - TLS/AN/IP67+TAST

DESCRIPTION

- Digital/analog weight transmitter suitable for back panel mounting on Omega/DIN rail or junction box for field mounting (on request box versions).
- Dimensions: 123x92x50 mm.
- Six-digit red LED semialphanumeric display (8 mm height), 7 segment.
- Six indicator LED.
- Four-key keypad for the system calibration;
- **If mounted near the load cells, it replaces the parallel board.**

INPUT/OUTPUT AND FIELDBUSES

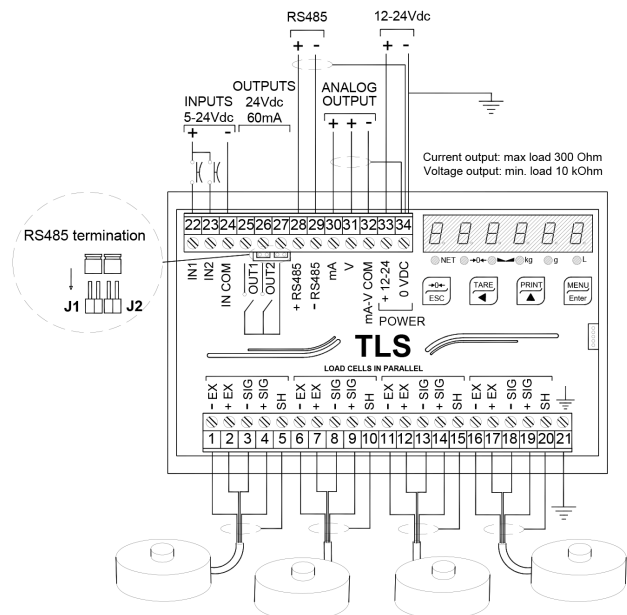
- Current or voltage 16 bit analog output
- RS485 serial port for communication via ModBus RTU protocol, ASCII bidirectional or continuous one way transmission.
- 2 optorelay digital outputs controlled by the setpoint values or via protocols.
- 2 optoisolated PNP digital inputs: status reading via serial communication protocols.
- 4 load cell dedicated inputs.
- The two inputs can work as net/gross weight, zero-setting, peak; the two outputs as set-points.
- Otherwise they can be remotely managed via protocol.
- In monidirectional mode the RS485 port can be directly connected to PC's or remote display's RS232 port.

AVAILABLE VERSIONS:

- TLS
- TLS/AN (with analogue output)
- TLS/IP67+TAST (IP67 box)
- TLS/AN/IP67+TAST (analogue output and IP67 box)

MAIN FUNCTIONS

- Connections to:
 - PLC via analog output.
 - PC/PLC via RS485 (up to 99 instruments with line repeaters, up to 32 without line repeaters).
 - remote display via RS485.
 - max. 8 load cells in parallel by junction box.
- Digital filter to reduce the effects of weight oscillation.
- Theoretical calibration (via keyboard) and real (with sample weights and the possibility of weight linearization up to 5 points).
- Tare weight zero setting.
- Automatic zero setting at power-on.
- Gross weight zero tracking.
- Semi-automatic tare (net/gross weight) and predetermined tare.
- Semi-automatic zero.
- Displaying the maximum weight value reached (peak).
- Direct connection between RS485 and RS232 without converter.
- Hysteresis and setpoint value setting.



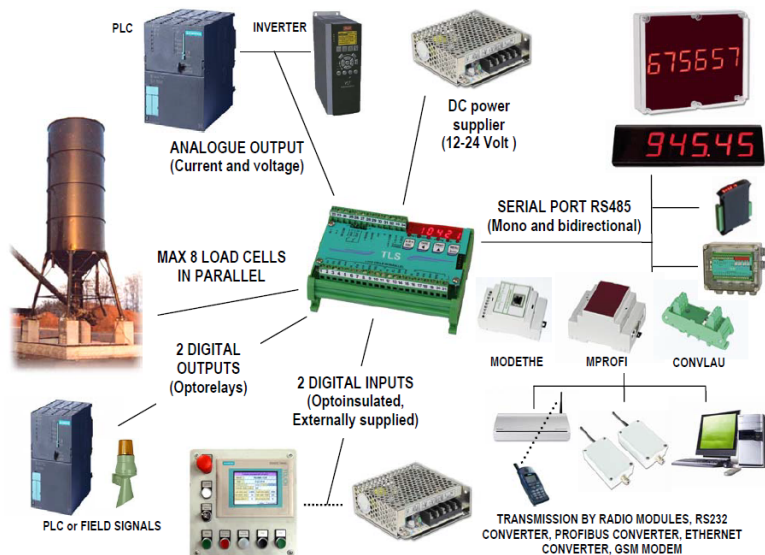
CERTIFICATIONS

CERTIFICATIONS ON REQUEST

	IP67 ATEX II 3GD (zone 2-22) version with 6 PG9 cable glands (cod. CASTLTASTATEX)
	IECEX (zone 2-22)
	UL Recognized component - Complies with the United States and Canada regulations
	Complies with the Eurasian Custom Union regulations (Russia, Belarus, Kazakhstan)

TECHNICAL FEATURES

Power supply and consumption	12÷24 VDC ±10%; 5 W
Number of load cells • Load cells supply	up to 8 (350 Ω) - 4/6 wires • 5 VDC/120 mA
Linearity • Linearity of the analog output	<0.01% full scale • <0.01% full scale
Thermal drift • Thermal drift of the analog output	<0.0005% full scale/°C • <0.003% full scale/°C
A/D Converter	24 bit (16000000 points) - 80 Hz
Divisions (with measure range ±10 mV and sensitivity 2 mV/V)	±999999 • 0,01 μV/d
Measure range	±19.5 mV
Load cell's sensitivity	±3 mV/V
Conversion per second	80/s
Display range	±999999
Decimals • Display increments	0÷4 • x1 x2 x5 x10 x20 x50 x100
Digital filter • Conversion rate	0.080÷7.5 s • 5÷80 Hz
Relay logic outputs	n. 2 - 24 VDC/60 mA
Optoisolated logic inputs	n. 2 - 5÷24 VDC PNP
Serial ports	RS485
Baud rate	2400, 4800, 9600, 19200, 38400, 115200 (bit/s)
Optoisolated analog output	16 bit = 65535 divisions. Current: 0÷20 mA; 4÷20 mA (up to 300 Ω) Voltage: 0÷10 V; 0÷5 V; -10÷10 V; -5÷5 V (min. 10 kΩ)
Humidity (condensate free)	85%
Storage temperature	-30°C +80°C
Working temperature	-20°C +60°C
Relay digital outputs	n. 1 - 30 VAC, 60VDC/150 mA
Power supply device marked "LPS" (limited power source) or "Class 2"	



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