

# "DGT1SX": HIGH-SPEED DIGITAL WEIGHT TRANSMITTER



High-performance multifunctional weight transmitter, the fastest of the Dini Argeo range. It can manage up to 4800 readings per second, for weighing with precision in milliseconds. For DIN rail mounting, it allows direct reading and diagnostics of the connected weighing system. The wide range of available interfaces makes the integration of weighing into any automation system easier and safer.

Available in the following versions:

**PROFINET | ETHERNET/IP | MODBUS/TCP | ETHERCAT | PROFIBUS | DEVICENET | CANOPEN | ANALOG OUTPUT | RS485 Approvals: CE-M EN 45501, OIML R-76, OIML R-61 (MID)**

## New features compared to DGT1S

- New cutting-edge processor, able to process up to 4800 weight readings per second. The high speed allows an extremely accurate weight filtering even with weighing being performed in milliseconds.
- Integrated Fieldbus.
- New power supply circuit of the load cells (up to 16) for a better weighing stability.
- Power supply circuit with protections against overloads, polarity reversal and short circuits, specific for industrial environments.
- Micro-USB communication port for configuration, diagnostics and data backup available on all versions. It can be used in conjunction with Xspeed tool, the PC program designed to configure the most suitable filtering for your system.
- Up to 120 updates per second on Fieldbus.
- Modbus RTU protocol integrated on all versions, up to 110 updates per second.
- Analog output available on Fieldbus versions (upon request), to modernize existing plants without modifying their main functioning.
- 2 more outputs, for a total of 4 digital outputs.
- Real time warning of any faults or disconnections of the load cell.

## Integrated Web Server (For Profinet, Ethernet/ip And Modbus Tcp/ip Models)

- The integrated WEB SERVER allows full diagnostics, calibration and remote configuration of the weight transmitter from an Ethernet network

## Certifications

- 2014/30/EU EMC
- 2014/35/EU LVD
- 2011/65/EU RoHS
- OIML R61 - MID
- OIML R76
- EU Type Examination Certificate (2014/31/EU)

## Technical Features

- Number of scales/channels: 1
- Calibration:
  - Theoretical (mV/V)
  - With sample weights
  - Via Web server
  - Via XSpeedTool
- Conversion rate: Up to 4800 Hz
- Maximum number of load cells: Up to 16x350Q
- Minimum sensitivity:
  - High resolution 0.01  $\mu$ V/d
  - Legal for trade 0.3  $\mu$ V/e
- Number of legal-for-trade divisions:
  - Up to 10,000e or multi-field 2x3,000e
- Load cell excitation voltage: 5 V
- Communication ports:
  - 1 micro-USB port (device)
  - 1 RS485 port (Mod. DGT1SX / DGT1SX-AN)
- Communication protocols: Modbus RTU, ASCII or Fieldbus
- Communication rate:
  - On serial port up to 1600 Hz
  - On Fieldbus up to 120 Hz
  - Via Modbus RTU up to 110 Hz
- PC programs for configuration: XSpeedTool
- Display: Red LED 8 mm, 6 characters
- Keyboard: 5-key mechanical
- Housing: ABS
- Power supply: 12÷24 Vdc, 5 W
- Operating temperature range:
  - For internal use -20°C ÷ +60°C
  - Approved -10°C ÷ +40°C
- Max humidity: 85%

## Inputs/outputs

- Analogue output: 16 bit (Model DGT1SX-AN)
  - 4÷20mA
  - 0÷10Vdc
- Digital outputs: n. 4 OUT, configurable
- Digital inputs: n. 2 IN, configurable

