DGT1S Multifunction, Digital Weight Transmitter/Indicator

Standard Features

- Easy to use 5-key waterproof keyboard.
- Red LED display with 6 8-mm digits and 6 LEDs for showing active functions.
- Standard dimensions for mounting on DIN bar.
- Calibration, Set-Up parameters, configurable from keyboard or from PC with DINI TOOLS.
- Up to 10.000e or multirange 2 x 3000e @ 0,3 µV/e in CE-M approved version for legal for trade use.
- Up to 800.000 displayable divisions with internal resolution up to 3.000.000 points.
- Up to **8 signal linearization points** with DINITOOLS (3 from keypad).
- 1 channel A/D 24-bit sigma-delta conversion, up to 400 conv./sec. autoselect.

Approvals

- Connectable with up to 8 analogue load cells with 350 Ohm input resistance.
- From 12 Vdc to 24 Vdc power supply.

Compact, multifunction weight transmitter/indicator, for panel mounting on DIN bar.
It allows the direct reading and diagnostics of the connected weighing system. The wide range of available interfaces, makes it easy to integrate the weighing with any automation system.

Approvals
CE-M EN 45501, OIML R-76, OIML R-61 (MID), OIML R-51 (MID), Australian approval

Specifications

Transmitter/Indicator Functions

Keyboard:
Fast calibration; theoretical calibration; weighing filter configuration; zeroing; Semi automatic and presettable tare, print and/or data transmission; ON/Stand-by.

Selectable:
High Resolution Weighing x 10; Lb/kg conversion; Approved transmission of the weight to PC/PLC (with ALMEM Alibi memory option) e Peak.
Available in 7.15 firmware version: Net/Gross; Weighs totalisation; Formulation; Counting; In/Out Truck weighing and Hold.

Serial Ports:
Reading of the net, gross, and tare weights; Clearing; Semi automatic and presettable tare; Scale switch; Setting of outputs activation thresholds; Reading/Writing of Alibi Memory. Reading of microvolts or ADC converter for all the channels; Message display; Printing; Setting of APW in counting mode; Simulation of key pressure; **MODBUS serial protocol.**

16 bit ANALOGUE OUTPUT on DGT1SAN:
Analogue output proportional to the net or gross weight, either positive (in loading) or negative (in unloading).

I/O Section:
- RS232/C bidirectional port
- Double RS485 port
16-bit analogue output (DGT1SAN model) 4-20mA / 0-5Vdc / 0-10Vdc at choice. Maximum load applicable on the output current: 300Ohm. Minimum load applicable on the output voltage: 1kOhm.
- 2 photomosfet outputs: 150 mA 48 Vac / 150 mA 60 Vdc (NO), with configurable functions.
- 2 optoisolator photocoupler inputs: 12÷24 Vdc, 5 mA min - 20 mA max, with configurable functions.

Master/Repeater Option (MSTSLV code):
- Specific program for use of the indicator as a universal weight repeater or as a multi-scale repeater (MASTER) in combination with DFW/DGT/MCW.

Functioning Modes:
- **Multi-scale repeater (MASTER)** function which allows to repeat up to 32 independent scales, with the possibility of managing their functions, or displaying and printing the sum of the weighs of all the scales.
- **UNIVERSAL weight repeater** function which allows to repeat the weight of any scales, through the configuration of the input string.

Certifications:
CE-M EN 45501
OIML R76
OIML R61 - MID
OIML R51
Australian legal for trade certificate of approval (NMI S788)

Upon Request:
UL certificated version

Parts

Part #	Description
{#Available Versions}	
DGT1S	Weight transmitter on DIN bar, with 2 INPUTS and 2 OUTPUTS. Fitted with 5-key keypad and LED display. Multifunction weighing program.
DGT1SAN	Weight transmitter on DIN bar, with 2 INPUT, 2 OUTPUT and analog output. Fitted with 5-key keypad and LED display. Multifunction weighing program.

Options

Part #	Description

{#RS485 lightning and surge protection}

RS485PDIN Protection circuit for port 485, with enclosure for DIN rail installation. Protection according to IEC 1000-4-5/D (IEC 801-5/D).

{#Approval for sale to third parties}

KCEM Plates and Welmec form for legal trade use of a scale. NET PRICE. Service available in combination with a Dini Argeo indicator.

ECEM-AU Single platform/scale legal-for-trade approval for Australia.

{#Storing Weighments}

SWM "WeiMonitor" PC program to monitor and record in real time weighs performed on the connected scale (the price is intended for the license to manage one scale).

{#PC software for managing weighbridges}

WEITRUCK-1 PC software for vehicle weighing. It can be combined with DFW, DGT and 3590 series' weight indicators. Databases to store customer, material and vehicle data, management of the totals and programmable printouts. Alibi Memory is required for DFW/DGT (3590 series is equipped with alibi memory as standard).

{#Printers / Labelers}

TPRP Panel thermal printer. Fitted with connection cable, 5Vdc power supply (power adapter not included).

TPRPCAL 5Vdc power supply unit.

{#Communication Interfaces}

WIFIT1S-1 Serial to WiFi compact converter for DIN bar.

ETHERCAT1S RS485 to EtherCAT interface, for DIN rail mounting. With UL marked PCB, Terminal block, plastic box and labels (if expected).

ETHERNETIP1S RS485 to Ethernet IP interface, for DIN rail mounting. With UL marked PCB, Terminal block, plastic box and labels (if expected).

CANOPEN1S RS485 to CANOPEN interface, for DIN rail mounting. With UL marked PCB, Terminal block, plastic box and labels (if expected).

DEVICENET1S RS485 to DeviceNET interface, for DIN rail mounting. With UL marked PCB, Terminal block, plastic box and labels (if expected).

PROFIBUS1S RS485-Profibus interface for DIN bar. With UL marked PCB, Terminal block, plastic box and labels (if expected).

PROFINET1S RS485 to ProfiNET interface, for DIN rail mounting. With UL marked PCB, Terminal block, plastic box and labels (if expected).

Part #	Description
ALMEM-1	Alibi memory (fiscal memory, max 120.000 weighs) for approved weight transmission to PC/PLC or data recording on MMC/USB. Built-in real time clock to print the date/time with PCB, screw terminal, plastic box and UL-marked labels. If applicable, it requires FW 05.00.02 or higher. Not compatible with weight repeaters.
485NC	RS485 network cable, 150mm long.

{#Date & Time option}

DFCLK	Real time clock for printing/displaying of date and time. With UL marked PCB, screw terminal, plastic box and labels (if applicable).

{#Power supply for DIN bar}

MDR2012	12Vdc power unit for DIN bar. 110/240Vac input. CE and UL certified. Not compatible with BOX2121S.
DR1512	12Vdc power unit for DIN bar. 110/240Vac input.

{#Options for ATEX version}

ZBA1S	Intrinsic protection three channel Zener barrier. Specific for connection to load cells, for mounting on DIN rail in a safe area, or in a flame-proof case. Marking: ATEX/IECEx II (1) GD [Ex ia Ga] IIC [Ex ia Da] IIIC. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
KZBA-1	ATEX ABS housing kit with Zener Barrier ZBA1S for load cells. For intrinsically safe weighing systems in a dangerous zone. Dimensions 179x359x166,5mm. Marking of housing + Zener Barrier ZBA1S: ATEX II 3(1)G Ex nA [ia Ga] IIC T4 Gc X for gas, ATEX II 3(1)D Ex tc [ia Da] IIIC T135°C Dc IP66 X for dust. Provided with safety instructions and the ATEX EU declaration of conformity (EN and IT).
KMB4-1	Kit of 3 ATEX Zener barriers for load cells, in an ABS box. For up to 4 load cells of 350 ohm, for intrinsic protection weighing systems in a dangerous area. Marking of the whole box with three Zener barriers: ATEX II 3(1)G Ex nA [ia Ga] IIC T4 Gc (-20°C = Ta = +40°C) for gas, ATEX II 3(1)D Ex tb [ia Da] IIIC T130°C Dc IP65 (-20°C = Ta = +40°C) for dusts. Provided with safety instructions and the ATEX EU declaration of conformity (EN and IT).
DCATEXMB4	ATEX declaration for the whole system with Dini Argeo Zener barriers. Ex II 2G IIC T6 Gb X e Ex II 2D IIIC T125°C Db X system, with label of the whole system, for weight indicator connected to Dini Argeo zener barriers, connected to a mechanical structure with ATEX load cells (each cell must be certified with CCATEX option). Provided with descriptive document of the assembly and ATEX EU declaration of conformity of the assembly (EN and IT).
JB4QA	ATEX equalisation box made of ABS IP67, for up to 4 cells. 4 + 1 fairleads. Marking: ATEX II 2G Ex ib IIC T6 Gb for gases, ATEX II 2D Ex tb IIIC T115°C Db IP65 for dust. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
JB4QAI	ATEX equalisation box made of stainless steel IP66 for up to 4 cells. 4 + 1 fairleads. Marking: ATEX II 2G Ex ib IIC T6 Gb for gases, ATEX II 2D Ex tb IIIC T115°C Db IP65 for dusts. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
EXCB6	Blue shielded cable 6x0.22 mm^2, only for EX i (2GD) assemblies. PVC inner sheath. Tinned copper braid shielding. Polyurethane outer sheath, diameter 5.8 mm. Temperature range: -40 / +80 °C. Minimum bending radius >/= 7 x O.D. €/m. Maximum orderable length: 100 m (longer lengths available only upon request).

{#Weight repeater software}

Part #	Description
MSTSLV	Program to use the indicator as a repeater. It must be combined with the DFW and DGT weight indicators.

{#Other Options}

TECMAN	Printed technical manual (Free download from the website).
UMAN	Printed user manual (Free download from the website).
TECSUP	Technical assistance by telephone upon request.
ECEMDOC	Printed EU declaration of conformity, EU certificate of verification, test certificate and metrological book (free download from our website, only for approved CE-M products). NET €.