

# DGTQ: Digital Weight Transmitter/Indicator



## Standard Features

- Easy to use 5-key waterproof keyboard.
- Highly efficient red LED display with 6 13-mm digits and 6 LEDs for showing active functions.
- Case for panel mounting in Abs according to DIN standard, 96x96x80 mm (lxhxp). Perforation 90x88 mm (lxh) for panel mounting.
- Calibration, Set-Up parameters, configurable from keyboard or from PC with DINI TOOLS
- Up to 10.000e or multirange 2 x 3000e @ 0,3  $\mu$ V/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.

## Approvals



Australian  
Government  
Approved



- Up to 8 signal linearization points with DINITOOLS (3 from keypad).
- A/D 24-bit sigma-delta conversion, up to 400 conv./sec. autoselect.
- Connectable with up to 8 analogue load cells with 350 Ohm input resistance.
- Management of a digitally equalised 4-cell weighing system or management of 4 independent weighing systems.
- Master/Slave management (up to 4 Slaves / 1 Master).
- From 12 Vdc to 24 Vdc power supply.

Multipurpose weight indicator/transmitter for panel mounting, 4 dependent or independent channels for direct reading and diagnostics of each connected load cell. The wide range of available interfaces makes it easy to integrate the weighing with any automation system.

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#### **Approvals**

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

# Specifications

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## Transmitter / Indicator: Functions

### Keyboard

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 totalization; Formulation; Counting; In/Out Truck weighing and Hold.

### External Input

Simulation of key pressure; Keyboard lock.

### Mosfet Output

Set Point Control on the weight, either positive (in loading) or negative (in unloading), or on the pieces (counting mode), with programmable enabling/disabling thresholds, as direct check or upon weight stability.

## Serial Ports

- **On all models:** 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.
- **DGTQ and DGTQAN models:** 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

Analogue output proportional to the net or gross weight, either positive (in loading) or negative (in unloading).

### Master/Repeater Options:

Specific programme 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 weights of all the scales.

#### UNIVERSAL weight repeater

function which allows to repeat the weight of any scales,

## I/O Section:

- RS232/C bidirectional port configurable for connection with external units.
- RS485 or RS232/C bi-directional port configurable for network connection.
- PROFIBUS serial interface (DGTQPB model).
- 2 photomofet outputs, expandable to 6 through the C4OUT option: 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.
- 16-bit analogue output (DGTQAN 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.

### Certifications:

CE-M EN 45501

OIML R76

OIML R61 - MID

OIML R51

Australian legal for trade certificate of approval (NMI S788)

through the configuration of the input string.

# Parts

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Part #	Description
<b>Available Versions</b>	
DGTQ	Transmitter for panel mounting, with 2 IN and 2 OUT. 5-key keypad, LED display, and standard weighing program.
DGTQAN	Transmitter for panel mounting, with 2 IN, 2 OUT, analogue output. 5-key keypad, LED display, and standard weighing programme.
DGTQPB-1	Transmitter for panel mounting, with 2 IN, 2 OUT, Profibus. 5-key keypad, LED display, and standard weighing programme.

# Options

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Part #	Description
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## 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).
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## 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.
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ECEM-AU	Single platform/scale legal-for-trade approval for Australia.
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## 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).
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## Weight Repeater Software

MSTSLV	Program to use the indicator as a repeater. It must be combined with the DFW and DGT weight indicators.
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## 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).
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## Printers / Labelers

TPRP	Panel thermal printer. Fitted with connection cable, 5Vdc power supply (power adapter not included).
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TPRPCAL	5Vdc power supply unit.
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## Communication Interfaces

SETHDIN-1	RS232 / RS485 / Ethernet converter. Modbus RTU / Modbus TCP/IP (if applicable). Connectable to all Dini Argeo weight indicators via the serial port. ABS housing for DIN rail. With PCB, screw terminals, plastic box and UL marked labels (if applicable).
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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.
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## 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).
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## Power Supply

Part #	Description
<b>MDR2012</b>	12Vdc power unit for DIN bar. 110/240Vac input. Voltage regulation range 10.8-13.2V, Max 20W, CE and UL certified. Not compatible with BOX2121S.
<b>DR1512</b>	12Vdc power unit for DIN bar. 110/240Vac input.
<b>Options for ATEX Version</b>	
<b>ZBA1S</b>	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).
<b>KZBA-1</b>	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).
<b>KMB4-1</b>	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).
<b>DCATEXMB4</b>	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).
<b>Other Options</b>	
<b>C40UT</b>	Set of 4 optoisolated outputs (mounting and cable gland excluded).
<b>TECMAN</b>	Printed technical manual (Free download from the website).
<b>UMAN</b>	Printed user manual (Free download from the website).
<b>TECSUP</b>	Technical assistance by telephone upon request.
<b>ECEMDOC</b>	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 €.

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