DGT603GD Maxi GOLIAH Weight Indicator-Repeater for Hazardous Areas

Standard Features

- Functional 5-key waterproof keypad.
- Large 6-digit display, 60 mm high, with very efficient SMD LEDs (software adjustment of the brightness intensity), complete of 6 Leds for indication of active functions, visible from over 25 m, with viewing angle up to 120° and with power up to 750 mcd.
- IP68 stainless steel case **complete of wall fixing bracket.**
- Calibration, Set-Up parameters, configurable from keyboard or from PC with DINI TOOLS.
- Max. 10.000e or multirange 2 x 3000e @ 0,3 µV/e in CE-M approved version for legal for trade use.
- Max. 800.000 displayable divisions viewable with internal resolution up to 3.000.000 points.
- Up to 8 signal linearisation points with DINITOOLS.
- A/D 24 bit sigma-delta 4-channel conversion, max.400 conv./sec. with automatic selection.
- Connectable with up to 8 analogue load cells with 350 Ohm input resistance.
- Management of a weighing system with up to 4 cells with digital equalisation or management of up to 4 independent weighing systems.

Approvals

Australian Government Approved

FORCE Certification

OIML

CS OIML Certification system

- Power supply from 110-240 Vac.

- Available as Scale or as Repeater version.

Weight indicator/ repeater particularly suitable for use in hazardous environments, where it's necessary to view the weight from a distance at any angle. Usable in areas:

- ATEX II 3G Ex nR IIC T6 Gc X for gases
- ATEX II 3D Ex tc IIIC T85°C Dc IP68 X for dust.

Fitted with a very bright 60mm LED matrix display and IP68 stainless steel case. CE-M approvable (OIML R-76 / EN 45501).

DGT603GD Maxi GOLIAH Weight Indicator-Repeater for Hazardous Areas Specifications

I/O Section:

- RS232/C bidirectional port configurable for connection to printer, PC, or other external units.
- RS485 bidirectional port configurable for connection to PC, PLC, or other external units.
- PROFIBUS bidirectional port (DGT60PB3GD model).
- 2 MOSFET 150 mA 48 Vac / 150 mA 60 Vdc (NO) outputs, with configurable functions.
- 2 optoisolator photocouplers: 12÷24 Vdc, 5 mA min - 20 mA max, with configurable functions.
- 16-bit analogue output (DGT60AN3GD model) 4-20mA / 0-5Vdc / 0-10Vdc at choice; maximum applicable voltage: 300 Ohm; minimum applicable voltage resistance: 1 kohm.

TAKE NOTE:
All the cables must be installed and protected according to the standards for electrical equipment.

DGT60R Functions:

- Version with 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.

Functions:

- **THROUGH KEYBOARD:** Zeroing; Semi automatic and presettable tare, print and/or data transmission; ON/Stand-by.
- **SELECTABLE:** High Resolution Weighing x 10; Net/Gross or lb/kg conversion; Weighs totalisation; Formulation; Approved transmission of the weight to PC/PLC (with Alibi memory ALMEM option); Counting; In/Out Truck weighing; Hold e Peak.
- **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.
DGT60BC3GD and DGT60AN3GD 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**.

- **THROUGH 16 bit ANALOGUE OUTPUT (DGT60AN3GD):** Analogue output proportional to the net or gross weight, either positive (in loading) or negative (in unloading).

Main Certifications:

- EU Type Examination Certificate (45501:2015)
- OIML R76
- OIML R61 - MID
- OIML R51

Parts

Part #	Description
	Available Versions
DGT60BC3GD-1	ATEX 3GD weight indicator with 60mm LED display. IP68 stainless steel case and 5-key keypad. Protection mode: ATEX II 3G Ex nR IIC T6 Gc X for gases and ATEX II 3D Ex tc IIIC T85°C Dc IP68 X for dust. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
DGT60AN3GD-1	ATEX 3GD weight indicator with 60mm LED display and analogue output. IP68 stainless steel case and 5-key keypad. Protection mode: ATEX II 3G Ex nR IIC T6 Gc X for gases and ATEX II 3D Ex tc IIIC T85°C Dc IP68 X for dust. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
DGT60PB3GD-2	ATEX 3GD weight indicator with 60mm LED display and Profibus. IP68 stainless steel case and 5-key keypad. Protection mode: ATEX II 3G Ex nR IIC T6 Gc X for gases and ATEX II 3D Ex tc IIIC T85°C Dc IP68 X for dust. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
DGT60R3GD-2	ATEX 3GD weight repeater with 60mm LED display. IP68 stainless steel case and 5-key keypad. Protection mode: ATEX II 3G Ex nR IIC T6 Gc X for gases and ATEX II 3D Ex tc IIIC T85°C Dc IP68 X for dust. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).

Options

Part #	Description

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.

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 €.

Optional Power Supply Cords

EXACB4 $4x0.5$ mm^2 armoured cable (suitable for Ex zones). PVC inner sheath. Armour: galvanised steel wire braid. Outer sheath PVC, diameter 7.3 mm. Temperature range: -30 / +80 °C. Minimum bending radius >/= 10 x O.D. €/m. Maximum orderable length: 100 m (longer lengths available only upon request).

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).

ZBINST Installation of the ZBA1S / PFB485EX zener barrier inside the indicator case. Note: The cable (LCCB for barrier ZBA1S, RSCBTW for barrier PFB485EX) of the desired length must also be purchased. NET PRICE.

LCCB Shielded cable $6x0.25$ mm^2 (suitable for Ex zones). PVC inner sheath. Tinned copper braid shielding. PVC outer sheath, diameter 5.8 mm. Temperature range: -40 / +80 °C. Minimum bending radius >/= 6 x O.D. €/m. Maximum orderable length: 100 m (longer lengths available only upon request).

PFB485EX Protection barrier for RS485, for direct connection in safe area. Max cable length: 200m.

RSCBTW 4-core twisted shielded cable ($2x2x0.34$ mm^2), for RS485 communication or analogue output. Polyolefin inner sheath. Tinned copper braid shielding. Outer sheath PVC, diameter 7mm. Temperature range: -30 / +80 °C. Minimum bending radius >/= 6 x O.D. €/m. Maximum orderable length: 100 m (longer lengths available only upon request).

DCATEX3GD Declaration of ATEX conformity of whole. Ex II 3G IIC T6 Gc X and Ex II 3D IIIC T115°C Dc X system, with relative label of whole system, for ATEX certified or NOT ATEX certified Dini Argeo indicator (in the latter case to be installed in a safe area) connected to a mechanical structure with ATEX load cells (each load cell must be certified with CCATEX or CCATEX3GD option). Provided with descriptive document of the assembly and ATEX EU declaration of conformity of the assembly (EN, DE, FR, ES and IT). Includes IP68 connection between platform and weight indicator.

Communication Interfaces

OBRF2G4-3GD 2.4 GHz radio frequency module for ATEX 2 & 22 zones. ABS IP66 case, 3 m shielded cable, and power supply from indicator. Protection: ATEX II 3G Ex ec IIC T6 Gc X for gases and ATEX II 3D Ex tc IIIC T85°C Dc IP66 X for dust. Max. functioning distance, in appropriate environmental and installation conditions: 45 m indoors, 140m outdoors. 39 configurable channels. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR and IT).

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

Part #	Description
	and UL-marked labels. If applicable, it requires FW 05.00.02 or higher. Not compatible with weight repeaters.
ETHD	Built-in Ethernet interface. Speed from 10 to 100 Mbps, TCP, UDP, IP, ARP, ICMP, Ethernet Mac protocols.
OBWIFI3GD-5	WIFI module for ATEX zones, with ABS IP66 case, 3 m shielded cable, and power supply from indicator. Protection: ATEX II 3G Ex ec IIB T6 Gc X for gases and ATEX II 3D Ex tc IIIC T85°C Dc IP66 X for dust. Max. functioning distance, in appropriate environmental and installation conditions: 30m indoors, 70m outdoors. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR and IT).

Connection Cables

RSCBTW	4-core twisted shielded cable (2x2x0.34 mm^2), for RS485 communication or analogue output. Polyolefin inner sheath. Tinned copper braid shielding. Outer sheath PVC, diameter 7mm. Temperature range: -30 / +80 °C. Minimum bending radius >/= 6 x O.D. €/m. Maximum orderable length: 100 m (longer lengths available only upon request).
ETHCBEX	Multi-core cable (4x2xAWG24) suitable for Ethernet connections in Ex-zones (connectors and cable gland only installed with S6 service). First shield: aluminium/polyester tape, second shield: tinned copper braid (coverage = 85% - EMC 89/336). Outer sheath: PVC, diameter 6.3mm. Temperature range: -30 / +80 °C. Minimum bending radius >/= 8 x O.D. Minimum length 10 m. €/m. Maximum orderable length: 100 m (longer lengths available only upon request).
ETHCBEX10M	ETHCBEX cable complete with cable gland and connectors. Length 10 m.

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).

Columns, Supports Brackets, Visors

STFR-1	AISI 304 stainless steel fixing bracket with adjustable inclination. For weight indicator wall mounting.

PG Cable Glands

PG9EX	10 PG9 metallic cable gland set for ATEX indicators. Complete with ferrules and seals. Cable diameter: 4 to 8 mm.

Other Options

TECSUP	Technical assistance by telephone upon request.