

DFWATEX2GDF Weight Indicator for Dosage in ATEX 1 & 21 Zones



Standard Features

- Waterproof 17-key numerical and functional keyboard.
- LCD display with 6 25-mm high contrast digits, clearly visible even in poor lighting conditions and with low temperatures, and icons for showing the active functions.
- AISI 304 stainless steel casing, with IP65 certified protection and IP68 performance.
- Dimensions: 264x174x115mm.
- May be angled either to be set on a table or a wall.
- A/D 24-bit sigma-delta conversion with 4 channels, up to 200 conv./sec. autoselect.
- Management of a weighing system from 1 to 4 channels (cells) with digital equalization.

- Connectable with up to 4 analogue load cells with 350 Ohm input resistance.
- Up to 1.000.000 displayable divisions with internal resolution up to 3.000.000 points.
- Up to 10.000e or multirange 2 x 3000e @ 0,3 $\mu\text{V/e}$ in CE-M approved version for legal for trade use.
- Calibration, Set-Up parameters, configurable from keyboard or PC with Dinitools.
- Up to 8 signal linearization points with DINITOOLS (3 from keypad).
- Memory back-up for recording dosage data in case it's accidentally turned off.
- Printing the dosage and consumption data, en sure zone through fiber optic.
- Power supply through external power adapter PW200XRD, with PW200IO option.

Weight indicator for areas classified as hazardous with protection methods according to: ATEX II 2(2)G Ex ib [ib Gb] IIC T4 Gb for gases and ATEX II 2(2)D Ex tb [ib Db] IIIC T197°C IP65 Db for dust. Ideal for creating automatic or semiautomatic dosage systems in loading or in unloading, or multiproduct dosages and mixtures. EC-Type-Examination certificate according to Annex III (ATEX directive). CE-M approvable (OIML R-76 / EN 45501).

DFWATEX2GDF Specifications

I/O Section:

- Fiber optic bidirectional port for connection with printer, labeller, PC, or PLC in safe area.
- 4 barriered logic digital outputs, with programmable function, for dosage system management, connectable to other intrinsic safety devices in a hazardous area.
- 4 inputs with functions depends on the selected dosage function.

Main Certifications:

- OIML R76

Dosage Configuration

Available dosage functions:

	<p><u>Single product dosage in loading functioning</u></p>
	<p><u>Single product dosage in unloading functioning</u></p>
	<p><u>Multi-product dosage functioning</u></p>

Parts

Part #	Description
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Available Versions

DFWATEX2GDF	ATEX 2GD indicator for single and multi product dosage. IP68 stainless steel case, 17-key keypad and LCD display. Protection mode: ATEX II 2(2)G Ex ib [ib Gb] IIC T4 Gb for gases and ATEX II 2(2)D Ex tb [ib Db] IIC T197°C IP65 Db for dust. To be combined always with the PW200XRDxxx series' power adapter and PW200IO option. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
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Options

Part #	Description
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Approval Kit

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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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 €.
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Declaration of ATEX Conformity

DCATEX2GD	Declaration of ATEX conformity of the assembly. Ex II 2G IIC T4 Gb X and Ex II 2D IIIC T197°C Db X SYSTEM, with relative label of whole system, for Dini Argeo ATEX weight indicator connected 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). Includes IP68 connection between platform and weight indicator.
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Power Supply and INPUT/OUTPUT for DFWATEX2GD

PW200XRD24D-1	ATEX power supplier with 24 Vdc input. 10,5 Vdc intrinsically safe output, complete of Exd case, with protection modes: ATEX II 2(2)G Ex d [ib Gb] IIC T4 Gb and ATEX II 2(2)D Ex tb [ib Db] IIIC T140°C Db. Equipped with connecting cable between PW200XRDxxx and DFWATEX2GDxxx with a length of 3 m. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
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PW200XRD24A	ATEX power supplier with 24 Vac input. 10,5 Vdc intrinsically safe output, complete of Exd case, with protection modes: ATEX II 2(2)G Ex d [ib Gb] IIC T4 Gb and ATEX II 2(2)D Ex tb [ib Db] IIIC T140°C Db. Equipped with connecting cable between PW200XRDxxx and DFWATEX2GDxxx with a length of 3 m. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
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PW200XRD115-1	ATEX power supplier with 115 Vac input. 10,5 Vdc intrinsically safe output, complete of Exd case, with protection modes: ATEX II 2(2)G Ex d [ib Gb] IIC T4 Gb and ATEX II 2(2)D Ex tb [ib Db] IIIC T140°C Db. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
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PW200XRD230-1	ATEX power supplier with 230 Vac input. 10,5 Vdc intrinsically safe output, complete of Exd case, with protection modes: ATEX II 2(2)G Ex d [ib Gb] IIC T4 Gb and ATEX II 2(2)D Ex tb [ib Db] IIIC T140°C Db. Equipped with connecting cable between PW200XRDxxx and DFWATEX2GDxxx with a length of 3 m. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
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PW200IO	Set of 2 ATEX cable glands for PW200XRDxxx. For the use of the INPUT/OUTPUT section on DFWATEX2GDIO or DFWATEX2GDF.
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PW200IO-1	Set of 2 ATEX cable glands for PW200XRDxxx-1. For the use of the INPUT/OUTPUT section on DFWATEX2GDIO or DFWATEX2GDF.
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EXACBPW	4x1 mm ² armored cable (suitable for Ex zones). PVC compound inner sheath. Armor: galvanized steel wire braid. Outer sheath made of PVC compound, diameter 8.8 mm. Operating temperature: -30 / +80 °C. Minimum bending radius $\geq 10 \times \text{O.D.}$ €/m. Maximum orderable length: 100 m (longer lengths available only upon request).
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Optical Fibres and Converter

Part #	Description
CBFOPT	Synthetic optical fibre cable. €/m (min. 10m). Maximum orderable length: 100 m (longer lengths available only upon request). Caution: requires one CNFOPT fibre optic connector set.
CNFOPT	Set of connectors for optical fibre cable for connection of the indicator to the fiber optic/RS232 converter.
FBDIN100	Optical fibre/RS232 converter for DIN bar, for synthetic optical fibre. The maximum length is 100m (greater lengths upon price estimate). For the connection with PC, PLC.

Communication Interfaces

DF485EX	ATEX RS485 port, for DFWATEX2GDF and DFWATEX2GDIO.
WPAN-CL	Classic WPAN device, complete with AMP cable and integrated antenna.

ATEX 2GD Remote Button Control

EXPHBN	EX 2GD hand control with 2 buttons and cable gland (optional connection cable). Protection II 2G Ex db eb IIC T6 Gb for gases, II 2D Ex tb IIIC T80°C Db for dust.
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 $\geq 10 \times$ O.D. €/m. Maximum orderable length: 100 m (longer lengths available only upon request).

Analog Output

PFB485EX	Protection barrier for RS485, for direct connection in safe area. Max cable length: 200m.
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.
MSTSLV	Program to use the indicator as a repeater. It must be combined with the DFW and DGT weight indicators.

RS485 Barriers

ZB485	RS485 active barrier. Mark: ATEX II (1) GD [Ex ia] IIC, I (M2) [Ex ia] I, II 3G Ex nA II T4, [Ex ia] IIC. 24Vdc power supply not included, we recommend the combination with ZBPWR24.
ZBPWR24	Power supply specific for ZB485 active barrier.
PFB485EX	Protection barrier for RS485, for direct connection in safe area. Max cable length: 200m.

Connection Cables

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 $\geq 10 \times$ O.D. €/m. Maximum orderable length: 100 m (longer lengths available only upon request).
EXACBPW	4x1 mm ² armored cable (suitable for Ex zones). PVC compound inner sheath. Armor: galvanized steel wire braid. Outer sheath made of PVC compound, diameter 8.8 mm. Operating temperature: -30 / +80 °C. Minimum bending radius $\geq 10 \times$ O.D. €/m. Maximum orderable length: 100 m (longer lengths available only upon request).

Part #	Description
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).
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).
LCCBA	Armoured cable 6x0.25 mm ² (suitable for Ex zones). PVC inner sheath, diameter 5mm. Iron-zinc alloy armour. Transparent PVC outer sheath, 8 mm diameter. Temperature range: -15 / +70 °C. Minimum bending radius >= 5 x O.D. €/m. Maximum orderable length: 100 m (longer lengths available only upon request).
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).

Columns, Supports Brackets, Visors

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

PG Cable Glands

PG7EX	10 PG7 metallic cable gland set for ATEX indicators. Complete with ferrules and seals. Cable diameter: 3 to 6.5 mm.
PG9EX	10 PG9 metallic cable gland set for ATEX indicators. Complete with ferrules and seals. Cable diameter: 4 to 8 mm.

Other Options

VENTX	ATEX Valve for regulating humidity and pressure inside the indicator. Advised for IP68 applications.
TECSUP	Technical assistance by telephone upon request.
TECMAN	Printed technical manual (Free download from the website).
UMAN	Printed user manual (Free download from the website).

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