3590EGT-IECEX3GD Touch screen Indicator for Ex 2 and 22 Zones

Standard Features

- IECEx certification.
- New enclosure with screwless front closure for easy cleaning of the indicator.
- PG7 and PG9 cable glands with adapters for 4 to 7 mm and 7 to 10 mm cable routing. Equipped with anti-friction system that does not require additional external cable fixing, as required by the IECEx scheme and ATEX directives.
- Available in specific version for direct connection to load cells installed in zone 1/21 and 0/20.
- **5,7' colour touch screen display**.
- **Multilanguage software**.
- 15-key alphanumerical waterproof keyboard.

- 3-way control light.
- Selectable QWERTY, AZERTY or QWERTZ keyboard integrated in the touch screen.
- **AISI 304** stainless steel casing, with IP65 certified protection and IP68 performance.
- Dimensions: 280x143x185mm.
- Suitable for use on the table.
- Real time clock and permanent data storage.
- Alibi memory as standard, integrated on the motherboard.
- Slot for built-in micro SD to record the configuration, logos, and customized screens (upon request).
- **Functions available with DINITOOLS utility**
  - Configuration, data entry and print formatting.
  - Recording and filing of all the information on PC.
  - Complete retrieval of the configuration.
  - Instrument calibration with numeric values.
  - Customization of the screens.
- 24-bit A/D converter, 4 channels, up to 3200 conv./sec. with automatic frequency selection and up to 8 signal linearisation points.
- 4 independent analogue channels for weight reading (up to 2 in E-AF03 version).
- Connection with up to 16 analogue load cells of 350 Ohm (45 load cells of 1000 Ohm).
- Up to 10.000e OIML or multi-range 3 x 3000e @ 0,3 µV/d CE-M legal for trade.
- Up to 1.000.000 displayable divisions for internal factory use, with internal resolution up to 3.000.000 points.
- Connectable to printers and labellers with free programming of the printout formats.
- Power supply from 110-240Vac line or 12-24 Vdc Max. 25.2W.

Weight Indicator for Hazardous Areas

Weight indicator with a big touch screen display, for ATEX 2 & 22 hazardous zones.
ATEX/IECEX marking:

- II 3G Ex nR IIC T6 Gc X (0°C<= Ta <=50°C) for gases
- II 3D Ex tc IIIC T85°C Dc IP65 X (0°C<= Ta <=50°C) for dust.

ATEX/IECEX marking with intrinsically safe connection for load cells:

- II 3G Ex nR [ia] IIC T6 Gc X (0°C<= Ta <=50°C) for gases.
- II 3D Ex tc [ia] IIIC T85°C Dc IP65 X (0°C<= Ta <=50°C) for dust.

Suitable for advanced industrial applications, it's fitted with 3 serial ports, Ethernet communication port, configurable printouts and integrated alibi memory.
CE-M approvable (OIML R-76 / EN 45501, OIML R-51 - OIML R-61 - MID for dynamic check weigher AWI).

3590EGT-IECEX3GD Specifications

I/O SECTION:

- 2 RS232 serial ports on terminals, for connection to printer, PC, radio module and optional interfaces.
- 1 RS485/RS232 serial port on terminals, for connection to weight repeater,remote scale, badge readers or digital load cells.
- 4 serial optoisolated outputs, up to 16 with optional board.
- 2 serial optoisolated inputs, up to 8 with optional board.
- Profibus or Modbus/TCP interface to install in safety zone.
- External Profinet, Ethernet/IP, EtherCAT, CANopen and DeviceNet interface to install in safety zone. (optional, only with standard AF01 weighing program).
- Modbus RTU Interface.
- Optional Wireless Personal Area Network (WPAN) connection, for

COMPLETE PROGRAMMABLITY FOR CUSTOMISED APPLICATIONS:

- Thanks to the integrated development area, fully customised applications can be created independently:
  - Specific weighing softwares according to customer requirements
  - Tailor-made weighing softwares to replace terminals in existing installations
  - Wizards, messaging for the operator
  - Serial port management, protocol customization
  - Complete digital I/O management
  - Sequential or simultaneous automations
  - Data entry, tailor-made archives

  Dini Argeo also offers the service of software development (to be quoted).

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STANDARD APPLICATIONS:

MAIN CERTIFICATIONS:

- EU Type Examination Certificate (45501:2015)
- OIML R76
- OIML R51 - MID
- OIML R134 (AF09)
- EN/IEC 60079-0
- EN/IEC 60079-11 (ZB version)
- EN/IEC 60079-15
- EN/IEC 60079-31
- Australian legal for trade certificate of approval (NMI S788)
- Certification according to ATEX directive 2014/34/EU and in compliance with IECEx scheme, group II category 3GD according to EN/IEC 60079-0, EN/IEC 60079-11, EN/IEC 60079-15, EN/IEC 60079-31.

AVAILABLE LANGUAGES:

- Menu selectable languages:IT, EN, FR, DE, ES, PT, PL*

  * Polish available only on EGT-AF01, EGT-AF02, EGT-AF03, EGT-AF04, EGT-AF09, EGT-BATCH, EGT-BATCH1

  Code pages available for the translation of messages and screens, using the Custom Language Tool program (downloadable in the Download section):

- Windows 1252: EN, GA, IT, NO, PT, ES, SV, DE, FI, IS, FR, NL, SL
- Windows 1250: PL, CS, SK, HU, SL, SH, RO, SQ, EN, DE
- Windows 1251: RU, UK, BE, BG, SR, MK, EN
- Windows 1253: EL, EN
- Windows 1258: VI, EN, FR AVAILABLE ON ESTIMATE
- Power supply 24 Vdc.
- PG13,5 anti-friction cable glands with adapters for the passage of cables

fast wireless programming of archives, via PC, tablet or smartphone.

- Analog output DAC16O requires IOEXPB expansion board.

- **SUPPLIED AS STANDARD:**

- AF01: Totalization and formula weighing

OPTIONAL:

- AF02: Piece/quantity counting

- AF03: Weighbridges - Vehicle In/Out

- AF04: Statistical check of prepackaged goods

- AF05: Price computing and industrial labelling

- AF08: Static wheel and axle weighing with 2 or more pads

- AF09: Software for dynamic or static axle weighing with 1 or 2 pads

- BATCH1: Single product dosage systems in loading and unloading

- BATCH: Software for multicomponent dosage systems in loading and unloading (requires IOEXPB expansion board)

from 5,5 to 8 mm and from 10,5 to 13 mm.

Parts

Part #	Description

Available Versions

Part #	Description
3590EGT-IECEX3GD	Ex colour Touch Screen indicator for zone 2/22 with AF01 software. Stainless steel enclosure with IP65 and IP68 certified protections. ATEX/IECEX II 3G Ex nR IIC T6 Gc X (0°C<= Ta <=50°C) for gas and II 3D Ex tc IIIC T85°C Dc IP65 X (0°C<= Ta <=50°C) for dust. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
3590EGT-IECEX3GDZB	Ex colour Touch Screen indicator for zone 2/22 with AF01 software, connectable directly to load cells installed in zone 1/21 and 0/20.Stainless steel enclosure with IP65 and IP68 certified protections. ATEX/IECEX marking: II 3(1)G Ex nR [ia] IIC T6 Gc X (0°C<= Ta <=50°C) for gas and II 3(1)D Ex tc [ia] IIIC T85°C Dc IP65 X (0°C<= Ta <=50°C) for dust. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).

Options

Part #	Description

Available Firmwares

Part #	Description
AF02	Software for piece/quantity counting.
AF03GT	Software for weighbridges, vehicle In/Out. For 3590 "TOUCH SCREEN" weight indicators.
AF04GT	Software for statistical checking of prepackaged goods. For 3590 "TOUCH SCREEN" weight indicators.
AF05	Software for price computing and industrial labelling.
AF08	Software for static wheel and axle weighing with 2 or more pads.
AF09	Software for dynamic and static axle weighing with 1 or 2 pads.
BATCH1	Software for single product dosage systems in loading and unloading.
BATCH	Software for multicomponent dosage systems in loading and unloading. NOTE: For 3590, IOEXPB expansion board is required.
CHECK	Software for packages weighting on a conveyor belt functions. R51 approvable.

Optional Power Supply Cords

Part #	Description
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).

Declaration of ATEX Conformity

Part #	Description
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.
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).

Approval for Sale to Third Parties

Part #	Description
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 €.
ECEM-AU	Single platform/scale legal-for-trade approval for Australia.

Part #	Description

Printers / Labelers for Safe Zones

Part #	Description
OBTPRB	Table thermal printer. For weight indicator, with IP40 ABS case, 1,5 m connection cable and internal power supply. Thermal paper roll included as standard.
CODEPG	Service for loading a customised code-page on TPR printer (standard is PC437 - Central Europe, USA)
LP542TE	Thermal transfer or direct thermal labelling machine Supplied with standard peel mechanism. Maximum printing size 25400 x 108 mm. Maximum roll Ø 127 mm and width up to 112 mm. Label roll and ribbon not included.
SMTPLUS-2	Thermal transfer or direct termal labeller. Peel-off kit in option. Maximum print size 25400 x 108 mm. Maximum roll Ø 203 mm and width up to 118 mm. Label roll and ribbon not included.
SMTRPK-1	Label peel-off and rewind kit for SMTPLUS-x labeller.
PRNSERV	Custom-made ticket (up to 4 layouts). NET price.
APRNSERV	Custom-made label (up to 4 layouts). NET price.

Connection Cables

Part #	Description
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.

Columns, Supports Brackets, Visors

Part #	Description
EXSTFR	AISI 304 stainless steel bracket, adjustable inclination. For mounting IECEX weight indicators on the wall or on TCBI columns.
EXSTFI	AISI 304 stainless steel wall bracket. For mounting IECEX weight indicators.
PANEL-ST	Bracket for mounting the indicator on the panel.

Storing Weighments

Part #	Description
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).

Software for Display Customization

Part #	Description
DDT	Software for the quick customisation of the touchscreen display. For 3590ET and 3590EGT series indicators.

Part #	Description

Communication Interfaces

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).
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).
PROFI232-1	External RS232/RS485/PROFIBUS interface for DIN bar. Connectable to the indicators with Profibus protocol with PCB, terminal blocks, plastic box and UL-marked labels (if applicable).
ETHD	Built-in Ethernet interface. Speed from 10 to 100 Mbps, TCP, UDP, IP, ARP, ICMP, Ethernet Mac protocols.
WPAN-CL	Classic WPAN device, complete with AMP cable and integrated antenna.
WPAN-LE	Low-energy WPAN device, complete with internal antenna.

Fieldbus Interfaces

PROFINET1S	RS485 to ProfiNET 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).
ETHERCAT1S	RS485 to EtherCAT 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).
CANOPEN1S	RS485 to CANOPEN interface, for DIN rail mounting. With UL marked PCB, Terminal block, plastic box and labels (if expected).
191750	Cable,Fieldbus option WE503
FB1SINST	Installation, configuration and testing of Fieldbus Module 1S (RS485 connection cable for fieldbus series, 191750 included). NET PRICE.

Display Customization

GTMEM	10 memories set for display customization with logos and images.

Digital Input / Output

IOEXPB	Built-in board with 12 OUT and 6 IN (mounting and cable gland excluded). It includes expansion circuit of the power supply range of the indicator (8-40Vdc). NOT COMPATIBLE WITH 3590E4CH AND TPRXT. With UL marked PCB, Terminal block, plastic box and labels (if applicable). Note: Accessory that can only be ordered in combination with a suitable weight indicator.

Part #	Description

Analog Output

DAC16OSER	Built-in RS232 / RS485 optoisolated analog output, 0-4/20 mA, 0-10VDC .
DAC16O-2	Built-in optoisolated analog output, 0-4/20 mA, 0-10VDC (cable gland excluded). For DFW, 3590 and CPW indicators. Output -10/+10VDC upon request, only at time of order. NOTE: For 3590, IOEXPB option board is required, available depending on the model.

PG Cable Glands

PG7-IECEX	PG7 Cable Gland for DFW and 3590 IECEx Series Cable diameter: 4 to 7 mm.
PG9-IECEX	PG9 Cable Gland for DFW and 3590 IECEx Series Complete with ferrules and seals. Cable diameter: 4 to 7 mm or 7 to 10 mm.
PG13-IECEX	PG13 Cable Gland for DFW and 3590 IECEx Series Complete with ferrules and seals. Cable diameter: 5,5 to 8 mm, 8 to 10,5 mm or 10,5 to 13 mm.

Other Options

TECSUP	Technical assistance by telephone upon request.