

Electronic Grounding Tester

Grounding Indicator and Interlocking system

for Tank trucks, railcars, drums and Big bags



Ex db ib [ib] IIB T4 Gb Ex ib [ib] tb IIIC T130°C Db

Health and safety standards (QHSE) for protecting personnel and plant assets require implementing counter measures for explosion hazards.

During loading and unloading of Non-conductive flammable liquids and powders electrostatic charge is generated on conductive objects (Trucks, Railcars, Rail tankers, Barrels, Drums, Big bags, IBC, Skids, LACT units).

To mitigate hazardous level of energy for spark formation and ignition of material atmosphere, earthing and continues monitoring is required during complete loading and unloading processes

EGT specific features

- Extreme temperature range
 - -55 °C +60 °C
- Season control
 - Robustness from change in ground conductivity variation between summer and winter season
- Wireless parameter change
 - Bluetooth / IrDa impedance level monitoring and setting
- Ultra-wide input supply range
 - o 20V DC to 350V DC
 - $\circ~$ 20 V AC to 230 V AC / 47 $^{\sim}$ 63 Hz





System	EGT
Certificate	IECEx FTZU 15.0005X
Protection	Ex db ib [ib] IIB T4 Gb
	Ex ib [ib] tb IIIC T130°C Db
Ingress Protection	IP65
Ambient Temperature	-55°C to +60°C
Voltage range DC	20 V DC ~ 350 V DC
Voltage range AC	20 V AC ~ 230 V AC
Power input	10 VA
Output circuits	2x potential-free switching contact
Bluetooth version	5.0 LE (Low Energy)
IrDA interface	USBIR 1 for IrDA
Weight	10,4 Kg

Type

EGT 4

Flameproof enclosure, ingress protection IP 65, typical target area: petrochemical industry





EGT4S

Flameproof enclosure made of stainless steel, protection IP 65, typical target area : offshore petrochemical





• FGT P

Stainless steel box, ingress protection IP 65, typical target area: food or pharmaceutical industry





Accesories

IrDA interface

Calibration set for IrDA interface

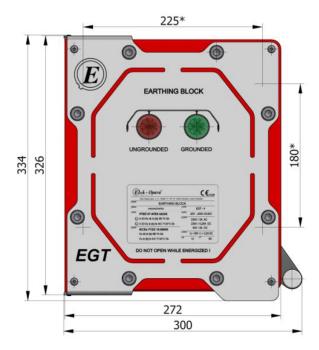
Self-retracting cable Reel

Multiple language versions (EN, DE, CZ, PL, RU)

EGT basic function

- 1. Initial safe electrostatic discharge
 - a. By connecting earth to discharging point
- 2. Operators error control (earthing object detection)
 - a. By Impedance measurement and check
- 3. Continuous earthing and monitoring of correct earthing during filling process
 - a. By resistance measurement and check
- 4. Process blocking and signaling
 - Two DPDT (double-pole double-throw) for process control
 - b. High visibility LED for system check





Sectors of application:

- Petroleum refineries transport of crude oil, petrol, diesel
- Fuel storage depots loading of petrol, diesel, kerosene
- Onshore facilities
- Chemical and petrochemical facilities (flammable liquids, alcohol, organic solvents)
- Paint industry
- Pharmaceutical industry (Big bags, dust environment)
- Food industry (ethanol, alcohol, grain, fertilizers handling)





Elok reserve the right to make alterations to the technical specification without notice.