

DST Digital Transmitter



The rugged, reliable DST digital transmitter offers a variety of sensor types to detect a wide range of gases, including solid state and electrochemical.

The standard enclosure is a rugged polycarbonate and an optional watertight polycarbonate enclosure is available to suit different applications.

DST transmitters output scaled linear signals on an RS485 communication bus, and feature a thermal resetting fuse, an LED indicator for power, alarm and fault, RoHS compliant circuit boards, and an internal "on line" LED.

Automated calibration and other maintenance procedures are simple and are easily performed in the field.

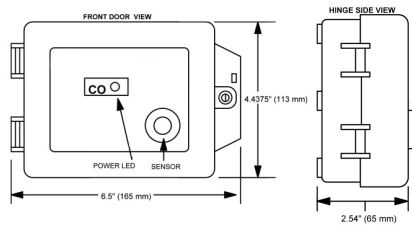
KEY FEATURES

- » RS485 digital output signal
- » Wide variety of sensors for all applications
- » RoHS compliant circuit boards
- » Configured for 4 wire multi-drop wiring
- » Thermal resetting fuse
- » LED indicator for power & alarm status
- » Power requirement 24VDC nominal
- » Simple calibration procedure

APPLICATIONS

- » Parking Garages
- » Repair Shops
- » Ice Cleaning Machine Rooms
- » Pools
- » Manufacturing plants
- » ... and many more

TECHNICAL DRAWING



SAMPLE ENGINEERING SPECIFICATIONS

Carbon Monoxide & Combustible Gas Transmitters for Parking Garages
Provide digital transmitters with continuous, linear, signal capable of being connected to a PDC controller on a RS485 communication bus. The transmitter shall be a CETCI model DST-ECO for Carbon Monoxide and a model DST-SCB for combustible gases. The transmitters shall provide a digital signal representing a Carbon Monoxide measurement range of 0 - 200 ppm CO or 0 - 50% LEL Propane (or other Combustibles gases / vapours). The circuit shall incorporate a long-life HVAC electrochemical sensor for CO or a long life solid-state sensor for combustibles with temperature compensation and an automatic resetting thermal fuse for fault protection.

The transmitter circuit shall be housed in a wall mount, rugged, break resistant, corrosion resistant, PVC junction box with a secured, hinged door. The PVC junction box shall have conduit entry ports on the top, bottom, right side and rear. The circuit shall operate from 24 VDC input voltage supplied from the controller. Wiring shall be 2 conductors for low voltage power, and a two wire shielded twisted pair for the communication bus. Wiring shall be shielded or in conduit.

An optional watertight Polycarbonate enclosure shall be available.

Provide digital signal readings to the controller to allow accurate settings for fan control at 25 ppm CO or 10% LEL Propane and a secondary alarm condition at 100 ppm CO or 20% LEL Propane.

The contractor shall provide all required wiring, conduit and interconnection required for a successful installation.

More specification samples are available at www.critical-environment.com.

DST Digital Transmitter

TECHNICAL SPECIFICATIONS

GAS TYPE

Ammonia (NH ₃)
Carbon Monoxide (CO)
Combustible Gas (solid state) <i>Hydrogen (H₂), Methane (CH₄), Propane (C₃H₈), etc.</i>
Hydrogen (H ₂)
Nitrogen Dioxide (NO ₂)
Nitric Oxide (NO)
Oxygen (O ₂)
TVOCs (solid state)

MECHANICAL

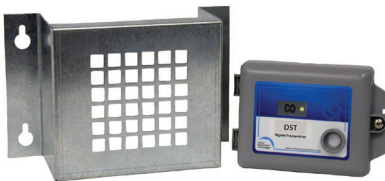
Enclosure	Polycarbonate
Weight	255 g (9 oz)
Size	4.4" x 6.5" x 2.5" (113 mm x 165 mm x 65 mm)

ELECTRICAL

Power Requirement	24 VDC supplied by PDC controller
Current Draw	80 - 120 mA
Outputs	Scaled linear digital signal RS485 communication bus
Wiring	Daisy chain configuration only. Power: 14 gauge stranded, 2-conductor Signal: shielded twisted pair, 18 gauge, low capacitance. Network bridge every 1,000 feet or less.
Fuse	Automatic resetting thermal

ENVIRONMENTAL (sensor dependant)

Operating Temperature	-20°C to 40°C (-4°F to 104°F)
Humidity	15 - 95% RH non-condensing



DST-ECO model is featured with a metal protective guard (picture above).

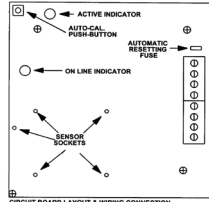


شرکت آلاپداز محیط

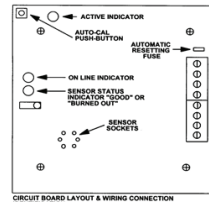
تهران - خیابان آزادی - مابین خیابان شادمهر
و بزرگراه یادگار امام - شماره ۴۱۷ - واحد ۵

تلفن: ۰۲۱-۶۶۰۲۸۱۷۲ - ۰۲۱-۶۶۰۲۸۱۷۳
فکس: ۰۲۱-۶۶۰۲۰۵۰۹
E-mail: info@apm-co.ir
Website: www.apm-co.ir

WIRING



Electrochemical



Solid State

PRODUCT CODES



Single Channel Sensor:

Electrochemical

- EAM** NH₃ sensor (0 - 500 ppm)
- ECO** CO sensor (0 - 200 ppm)
- EH2** H₂ sensor (0 - 2,000 ppm)
- ENO** NO sensor (0 - 100 ppm)
- END** NO₂ sensor (0 - 10 ppm)
- 002** O₂ sensor (0 - 25% volume)

Solid State

- SCB** Combustible gas sensor (0 - 50% LEL)
- SCB** H₂ sensor (0 - 50% LEL)
- SCB** CH₄ sensor (0 - 50% LEL)
- SCB** C₃H₈ sensor (0 - 50% LEL)
- S05** TVOCs (0-500 ppm)

ACCESSORIES

Calibration kit for 17 - 103 L cylinders, 0.5 LPM flow regulator & adapter to fit 17 L cylinder	CE7-715A-KC1
Metal protective guard, small, 16 gauge, galvanized metal guards for transmitters	SCS-8000-RSG