



NIC STAND ALONE TRANSMITTER

Gas Detection For Life

Eclipse™ Model



Features

- Non intrusive calibration
- Patent pending optically driven controls
- No tools required for calibration
- Direct digital readout
- Explosion proof housing
- Patented water repellent sensor coating
- Operates independent of a controller
- Available for LEL, H₂S, CO, and O₂
- Long life sensor (2 + years typical)
- Competitively priced

Industry Applications

- Petrochemical plants
- Refineries
- Offshore Drilling Platforms
- Water & wastewater treatment plants
- Pulp & paper mills
- Gas, telephone, & electric utilities
- Parking garages
- Manufacturing facilities
- Steel
- Automotive
- HVAC

The RKI ECLIPSE™ model is a unique single gas non-intrusive calibration (NIC) smart transmitter for LEL combustibles, oxygen, hydrogen sulfide, or carbon monoxide. The ECLIPSE™ is microprocessor controlled, simple to install and operate, requires no tools or magnets to operate and has no moving parts. It utilizes a patent pending **eclipse** type technique for accessing the zero and calibration modes.

The zero and calibration functions are performed by placing your finger over a special optical sensor built into the transmitter. If the optical sensor is covered (**eclipsed**) in a designated security sequence, then the zero and calibration controls are activated. The ECLIPSE™ automatically compensates for background light changes in the area.

The housing of the ECLIPSE™ never needs to be opened, which allows for simple calibration without the effort of declassifying the area. It is designed so that a complete field calibration can be performed by one person. The stainless steel flame arrestor housing that covers the sensor is water repellent with a special patented water resistant coating.

The transmitter provides a 4-20 mA output which is powered by a 24 VDC power input.

The ECLIPSE™ represents the latest leading edge technology in sensor / transmitters today.

RKI Instruments, Inc. • 33248 Central Ave. Union City, CA 94587 • Phone (800) 754-5165 • (510) 441-5656 • Fax (510) 441-5650

World Leader In Gas Detection & Sensor Technology
www.rkiinstruments.com

Eclipse™ Model

Outputs

- 4-20 mA** 4-20 mA signal, into 500 ohms impedance max, corresponding to 0 - full scale.
- Display** Alphanumeric display with back-lighting. 8 characters per line; 2 lines, for gas concentration read-out, and zero & span mode read-outs.
- Controls** 1 patent pending eclipse type optical sensor for control of all functions. Operates without opening the housing.

Environmental

- Operating Temp** 14°F to 122°F (-10°C to 40°C)
- Storage Temp** -4°F to 158°F (-20°C to 70°C)
- Relative Humidity** 5 - 95% RH non-condensing
- Enclosure Rating** NEMA 7, explosion proof, watertight, cast aluminum with o-ring seal and epoxy powder coating.

Physical

- Dimensions** Height: 8.5" 215 mm
Width 5.2" 132 mm
Depth 4.5" 114 mm
- Enclosure** Explosion proof for Class I, Div 1 Groups B, C, D.

Sensors

- Sensor Types** LEL Catalytic combustion
H₂S Electrochemical
CO Electrochemical
O₂ Electrochemical - Galv.

- Measuring Ranges** Combustible 0 - 100 % LEL
Hydrogen Sulfide 0 - 100 ppm
Carbon Monoxide 0 - 300 ppm
Oxygen 0 - 25 % Vol

Power

24 VDC input power from controller or external power supply.

Approvals

LEL version is UL approved for use in hazardous areas, Class I, Div. 1, Groups B, C, D.
CSA Approved version available for LEL, H₂S, CO. Housing itself has CSA, UL and FM approvals for use in hazardous areas.

Warranty

One year on electronics and sensors.

Optical Sensor Technique:

RKI Instruments has revolutionized NIC style transmitter designs with the ECLIPSE™.

Utilizing a new patent pending optical sensor technique, the ECLIPSE™ can access the zero and calibration modes without opening its explosion proof housing. The ECLIPSE™ requires no magnets, special tools, or I. R. transmitters to operate, and has no moving parts. Simply place your finger over the "optical sensor" in a special sequence to access and activate the calibration and zero modes. This pre-defined access sequence also provides a security feature against unauthorized personnel as well as preventing accidental entry into these service modes.

The ECLIPSE™ is also designed with a special safeguard, making it impossible to adjust span levels without applying actual span gas.

Specifications subject to change without notice.

Made in the USA

RKI Instruments, Inc.



33248 Central Ave.
Union City, CA 94587

Toll Free: (800) 754-5165
Phone: (510) 441-5656
Fax: (510) 441-5650

mail4rki@rkiinstruments.com
www.rkiinstruments.com

Authorized Distributor: