Specifications

Power Requirements	22 to 26VDC @ 200mA Per unit
Power Connections	Pluggable, screw terminal block at the top-front of the housing –-or— Via the interconnection Bus and a Model 2A56 Universal AC Input Power Supply Module
Input Range	4 to 20mADC
Input Impedance	127 Ohms + 1 Diode drop
Unit Accuracy	0.05% @ 25°C
Ambient Effect	0.05% / 50°C change
Ambient Range	-40 to 85°C 0 to 95% Humidity (Non-condensing)
System Response	< 2ms (10 to 90% step)
Optical Wavelength	1300nm
Optical Cable (typical)	62.5/125µm multi-mode simplex (one) fiber optic cable
Optical Loss Budget	25dB, 62.5/125µm fiber, mated with a 2R18
Optical Connectivity	ST compatible
Electrical Connections	Pluggable, Cage Clamp Screw Terminal Blocks, Accept 12 to 24 AWG
Mounting	35mm DIN Rail
Weight	< 9oz
Flammability Rating	UL V-0

Safety and Warning Information

When in operation, do not look directly into the transmit optical port or use magnification or focusing equipment to view optical output.

IEC 60825-1, Class 1 LED Product
FDA 21 CFR 1040.10 & 1040.11

CAUTION: Use of controls and/or adjustments or the performance of procedures other than those specified herein may result in hazardous radiation exposure.

Important Notice - Before utilizing the product, the user should determine the suitability of the product for its intended use. The user assumes all risk and liability in connection with such use. WEED INSTRUMENT'S WRITTEN WARRANTY FOR THE PRODUCT IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. The user's exclusive remedy for breach of Weed Instrument's written warranty shall be the repair or replacement of such quantity of product which is proven to be defective. In no case shall Weed Instrument be liable for any special, incidental, or consequential damages based upon breach of contract, negligence, strict liability or other legal theory.

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Weed Instrument
Fiber Optics

EOTec 2000 Model
2T18
FOT 4 – 20mA

Installation Instructions

Analog Link
Fiber Optic Transmitter (FOT)

4 to 20mA Process Signal to Fiber Optic Converter

1300nm, ST Connection

ST is a trademark of AT&T

Description

The Model 2T18 Fiber Optic Transmitter (FOT) Analog Link is designed to accept a 4 to 20mA process signal and convert it to a fiber optic signal. The mated 2R18 Fiber Optic Receiver (FOR) returns the signal to its original 4 to 20mA format.

Absolutely no field adjustments are required as all units deliver the highest degree of accuracy over their entire specified ambient temperature range.

LED Indicators

The Model 2T18 has a green LED to indicate the presence of POWER. Two separate amber LED indicators give visual indication that the analog input signal is OVER RANGE (above) or UNDER RANGE (below) of the normal input signal limits.

System Troubleshooting Tips

Verify that the power supplies are on, that they are the correct voltage and current rating and are connected in the correct polarity.

Verify the correct polarity connections are made to the INPUT and OUTPUT terminals.

Measure the INPUT signal level to the FOT and ensure it is within the normal range.

Verify the connections of the fiber optic cable are secure.

Verify the LOCK LED is illuminated on the FOR. If it is not, this may indicate inadequate optical signal from the FOT, a broken or high loss fiber, or a defective FOT or FOR unit.

Verify that the OVER RANGE and UNDER RANGE LEDs are not illuminated on either unit.

If you are still experiencing difficulty, contact the factory for assistance.

Connections

There are two pluggable terminal blocks on the FOT and each has 4 screw terminal connections.

POWER: The terminal block at the top-front of the housing is where connection may be made for supplying the unit's operating power from a nominal 24VDC source. The unit may also obtain operating power from the Model 2A56 power supply module via the modules integrated Bus interconnections. The Model 2A56 is a universal AC input power supply. Both power sources may be connected to the FOT for redundancy. The power connection terminals numbered from left-to-right are as follows:

Terminal 1	no connection
Terminal 2	(+) plus 24VDC
Terminal 3	(-) negative 24VDC (Return)
Terminal 4	CASE (DIN rail, chassis, Protective Earth Ground)

GROUNDING: The CASE terminal and the negative power terminal of the FOT should always be connected through low impedance to Earth Ground.

IMPORTANT NOTE: Internally, the FOT's negative (-) input terminal is connected to the 24VDC supply negative (-) input terminal.

INPUT: The terminal block at the lower-front of the unit is where the connections are made to the 4 to 20mA input signal. The connection terminals numbered from left-to-right are as follows:

Terminal 1	no connection
Terminal 2	no connection
Terminal 3	(+) plus 4-20mA INPUT
Terminal 4	(-) negative 4-20mA INPUT

OPTICAL CONNECTION: The TX optical port on the front of the unit accepts an ST simplex (one) fiber connector and is compatible with any size of multi-mode glass fiber. This fiber port generates the optical data information that will be passed to the mated Fiber Optic Receiver (FOR).

Connections