ENCODER TESTER
ELECTRONIC MODULE

This test module accepts input from any type of incremental optical encoder. It tests for two channels in quadrature, an index pulse, and power to the module. It features a simple and intuitive LED indicator scheme: lights are on to indicate that a signal is HI and off when the signal goes LO. At full speed operation, the A and B channel LEDs will blink so rapidly that they will appear to be continuously lit and the index channel will flicker. To see the ON-OFF operation of the LEDs just turn the encoder slowly by hand. Through combinations of terminal connections and dropping resistors (supplied), it can test open collector outputs, and both single ended and differential outputs at all standard voltages: 5VDC, 12-15 VDC, and 24 VDC. This tester can also be used for machine set-up (by locating the index pulse) and incoming inspection and diagnostics of encoded motors.

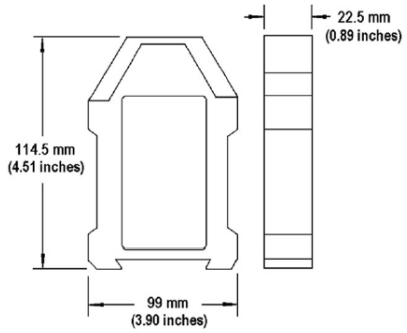
ELECTRICAL SPECIFICATIONS

POWER:
The encoder tester uses an internal voltage regulator. It is powered by an external power supply of 4.5 to 26 VDC. This unit should never be connected directly to AC power mains. The test module draws approximately 75 mA and a green LED indicates the unit is powered. The encoder under test must also be connected to a power supply (Power supply not included).

SIGNAL:
The encoder tester is designed around the most common type of encoder output – a TTL level (RS422) differential line driver. However, it can be used to test most encoder signal types with the proper connections. Please follow the connection diagrams and the table as detailed in the specification sheet for the type of encoder signal that you will be testing.

MECHANICAL SPECIFICATIONS

Package dimensions are 114.4 mm high by 99 mm wide by 22.5 mm thick. The package mounts to a DIN rail type EN 50 022 (35mm X 7.5mm). A length of DIN rail is supplied with each tester. The DIN rail section can be mounted directly to the back of a bench test stand with standard sheet metal or wood screws. The tester simply snaps directly to the DIN rail and is ready to use.



Output Code Format From Encoder	Dual Channel in quadrature with index and complements. Data lines are designated A, B, Z, A-, B-, Z- at the module
Output Signal Type From Encoder	TTL level (RS422 compatible) differential line driver (Use Connection Instructions #1) TTL level (RS422 compatible) single ended line driver (Use Connection Instructions #1) Single ended open collector with pull-up resistors internal to encoder (Use Connection Instructions #2) Single ended, open collector (Use Connection Instructions #3)
Frequency Response of Tester	1 MHz, maximum
Power Requirements For Tester	Input supply voltage 4.5 to 26 VDC, 75 mA (typical)
Protection Level	Supply lines protected against over voltage to 60 volts and reverse voltage

BEI SENSORS