MODEL I-210A, I-210B

CURRENT SENSOR

DESCRIPTION

The PRODYN Model I-210A & B Sensors are clamp-on, radiation-hardened current transformers. The sensors are designed to measure the current on large cable bundles. The differential output voltage is an accurate representation of the total current flowing through the central aperture of the sensor (subject to bandwidth limitations of the sensor). The relationship between the sensed current and output voltage is:

$$\text{differential } V_{out} = R_T \times I_{sensed};\ R_T = \text{transfer impedance}$$

The sensors are split to allow clamping the device onto a cable, cable bundle, or structural member that fits the central aperture. The presence of the sensor adds a series impedance to the sensed current carrier. This is referred to as the Insertion Impedance.

ELECTRICAL SPECIFICATIONS

	I-210A	I-210B
Transfer Impedance	0.125 ohms	0.131 ohms
Frequency Response (3 db)	100 Hz - 4 MHz	70 Hz - 2.5 MHz
Current Range of Measurement	10 - 100 amps	10 - 100 amps
Core Material	Metal Tape	Metal Tape
Output Connector	100 ohm differential, twinax, Amphenol 22950 or equivalent*	100 ohm differential, twinax, Amphenol 22950 or equivalent*
Aperture	12" Diameter	12" Diameter

*Other connector types are available. Please consult factory for options.

PHYSICAL