

ADVANCED 3-PHASE AC CURRENT MONITOR w/ RS-485 OUTPUT

FEATURES:

- ◆ True RMS, 0.1% accuracy
- ◆ Supports a wide variety of solid core and split core CTs
- ◆ Modbus/RS-485 communication
- ◆ Customizable scaling, filtering, Modbus map, and serial settings
- ◆ Compact Size, Easy Wiring, DIN Mounting
- ◆ Ideal for Control and Energy Management Applications



APPLICATION:

The i-Spy offers inexpensive yet accurate true RMS monitoring of AC current in three independent circuits or one three-phase circuit.

This unique product is ideal as a precision AC load monitor for Control and Energy Management applications.

The i-Spy combined with inexpensive current transformers provides a convenient tool for accurate load monitoring in any electrical equipment.

SPECIFICATIONS:

Power Req.: 12–30 VDC/VAC

Current Inputs (depends on model):
 -5A: 5A CTs
 -mA: 0-200mA via MCT/MSCT — Elkor solid/split core CTs
 -mV: 0-333mV CTs

Output: RS-485 digital communication port.
 Modbus/RTU
 Software Configurable Serial Settings (Baud, Parity, Stop)
 Rotary Switch for Modbus Address (1-15, software programmable for higher settings).

Accuracy: TRMS, 0.1% of reading, output resolution of up to 20 bits
 Bandwidth up to 2 KHz

Environment: -40°C to 70°C, RH 90% non-condensing

Indication: Status — bicolour green/red LED
 Transmit/receive — bicolour red/green LED
 Current — 3 bicolour red/green LEDs (one per phase)

Mounting: DIN Rail — universal DIN attachment mounted on the back of enclosure; dim. h=3.75" w=2" d=2.25" (95x50x60mm).

PRODUCT DESCRIPTION:

The i-Spy is a precision current monitor that performs true RMS current measurements in three circuits (single three-phase or three independent) AC loads.

Available in 5A, 333mV and mA input versions, it supports a wide variety of current sensors including split and solid core CTs.

The i-Spy measures true RMS current in three input channels and makes the data available via Modbus/RTU (RS-485). User configurable scaling factors may be applied to the measured values for ease of use and compatibility. Proprietary noise filtering expands the dynamic range of the device and improves the accuracy and stability of readings at low currents.

Serial settings including baud Rate, parity, and stop bit settings may be user configured. The Modbus device address is set via an on-board rotary switch (1-15, higher addresses programmable via Modbus). Modbus data registers are available in 16-bit integer, 32-bit integer, and 32-bit floating-point formats with configurable scaling, and the register layout may be re-mapped for efficiency or compatibility with other devices.

The i-Spy is powered by 12-30 VAC/VDC. The unit is housed in a universal DIN mount enclosure and features screw-type terminal blocks for easy field wiring.

ORDERING INFORMATION:

i-Spy- [CT]

[CT] Specifies CT Input Type:

- 5A = Inputs for 5A CTs
- mA = Inputs for mA output CTs (up to 200mA)
- mV = Inputs for 333mV output CTs
- RC = Inputs for Rogowski Coil (up to 360mV)