

DESCRIPTIVE BULLETIN

CYBER SCIENCES IRIG-B Distribution Module STR-IDM

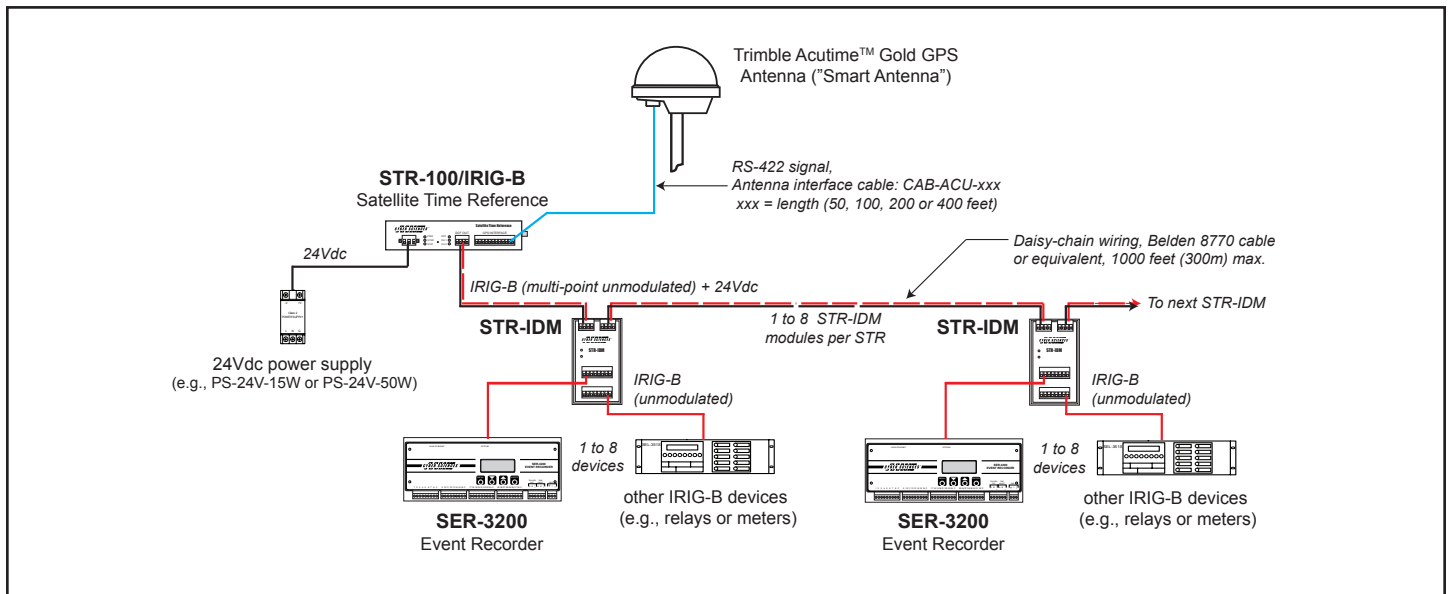


The Cyber Sciences Satellite Time Reference IRIG-B Distribution Module (STR-IDM) is a companion product to the STR-100/IRIG-B Satellite Time Reference that enables the distribution of an unmodulated IRIG-B signal over long distances and to multiple devices.

Each STR-IDM provides 8 additional IRIG-B outputs. These outputs are electrically isolated from the source device (e.g., STR-100/IRIG-B) to eliminate concerns about multiple ground references. The STR-IDM requires no separate power supply; it derives its own power by DC-DC conversion of a voltage carried on the daisy chain link from the STR.

Depending on distance, up to 8 STR-IDM modules can be connected in a multi-point system. This allows the user maximum flexibility in system layout and design. Thus, a total of 64 IRIG-B devices may be synchronized from a single STR precision time reference.

The STR-IDM simplifies wiring of IRIG-B time signals, saving cable and labor costs. Used with the STR-100/IRIG-B Satellite Time Reference, the IDM distributes an IRIG-B signal over long distances and to multiple devices (up to 8 devices per IDM).



GPS system architecture showing IRIG-B time sync output signals (model STR-100/IRIG-B) with STR-IDM

Product highlights

Cost savings. Simplified wiring and shorter cable lengths.

Self-powered. No external power supply required.

Trouble-free. Electrically-isolated outputs eliminate concerns about multiple ground references.

Standard IRIG-B. Uses industry-standard IRIG-B time code.

Commissioning aids. Diagnostic LEDs to monitor power and IRIG-B signal.

Reliable operation. Surge protection on all interfaces.

Easy mounting. DIN-rail mounting. All connectors and indicators front-accessible.

SPECIFICATIONS

Indicators	Two (2) LEDs: Power and IRIG-B time signal.
Standard IRIG-B Outputs	Eight (8) TTL-level IRIG-B outputs (5Vdc nominal): Vlow (max. voltage for logical "0") = 0.4 volts @ 24 mA Vhigh (min. voltage for logical "1") = 3.2 volts @ -15 mA
Power Requirements	24Vdc +/- 10% (derived from STR-100/IRIG-B). No separate power supply required.
Isolation	> 1000 Vac rms between power and signal inputs and outputs. All inputs / outputs include transient protection.
Environmental	-30°C to +80°C ambient operating temperature. -40°C to +85°C storage temperature. Humidity 5-95% (non-condensing) at 40°C.
Mounting	DIN-rail mount. All connectors and indicators on front.
Dimensions	2.7 in. wide x 4.7 in. high x 2.0 in. deep (69 x 119 x 51 mm)
Weight	approximately 5 oz. (143g)



STR-IDM — Side view



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Cyber Sciences, Inc. USA

ORDERING INFORMATION

Catalog no.	Description
STR-100	Satellite Time Reference, base model, DCF77 / 1per10
STR-100/IRIG-B	Satellite Time Reference, unmodulated IRIG-B output
STR-IDM	IRIG-B Distribution Module for STR