Radar Sensors for Traffic Detection

AccuScan TMIB

What, exactly, is the TMIB?

Econolite’s TMIB cabinet interface module is a TEES/TS2-compliant detector card that supports the AccuScan Series of radar detection sensors. The TMIB connects up to four AccuScan radar units to a traffic controller in the cabinet. It also facilitates Ethernet-based setup and monitoring communications from a PC to the radar units.

Why do agencies use a TMIB?

As the complexities of traffic management increase, ITS strategies are valuing more and more the multi-tasking capabilities of intelligent detection sensors to not only accurately detect traffic at the stop bar to trigger a signal change, but to count, classify, track, and even provide advanced detection for traffic adaptive systems and dilemma zone safety applications. Today’s multi-modal intersections and roadways require the multi-modal capabilities of leading-edge detection sensors to provide capabilities such as bicycle detection and differentiation.

How does a TMIB benefit the driving public?

Econolite’s vehicle detection solutions continue to play a critical role in helping ITS deliver on the promise of enhanced public safety, reduced congestion, shorter travel times, lowered environmental impacts, and increased cost savings for all roadway users.
Installation Options:

- Detector Rack installation
  - 4 rear-edge outputs or up to 16 rear-edge outputs with expansion modules
  - 4 rear-edge status outputs for use with BIU
  - 12 outputs on front panel for wired I/O or to expansion modules
  - SDLC protocol emulates up to 4 BIU functions for up to 64 outputs

- Shelf-Mount Enclosure installation
  - 12 wired open-collector outputs on front panel
  - SDLC protocol emulates up to 4 BIU functions for up to 64 outputs

General Data:

- Electrical
  - 10 to 30 VDC, 2.5W, power on read-edge connector
  - Consumption, current <100 mA @ 24 VDC
  - Reset Switch

- Interfaces
  - 44-terminal double row Cinch Jones card edge connector
  - DB-15 NEMA TS2 / TEES SDLC protocol
  - HD-15 for 12 open-collector outputs, 12 or 24 VDC, Ground True
  - RJ45 100Base-Tx Ethernet for PC Data Communication Protocol
  - 4x UMRR sensor interface
  - Optional external power supply
  - Debug and USB connectors (reserved)

- Supported Traffic Sensors:
  - Up to 4 AccuScan models with RS-485 output

- Detector Outputs
  - Up to 16 wired open-collector outputs with expansion module (4 detector outputs on rear-edge connector with status angle)
  - Port 1 SDLC protocol response offers up to 64 outputs

Indicators
- 24 status LEDs (4 x 6 grind) for diagnostics and 16 outputs (2 power, 2 heartbeat, 2 error, and 2 SDLC rack)

Regulatory
- NEMA TS2-2003 compliant
- TEES
- FCC Part 15, Class A

Product support and training available through the EGI Learning Center

Basic Specifications

- Dimensions & Weight
  - H x W x L: 114mm x 57mm x 178mm (4.5in x 2.2in x 7in)
  - Weight 0.4 kg (0.8 lb.)

- Environmental
  - 12 or 24-VDC 11 Watts maximum

- Warranty – 2 years