Model GPU - General Processing Unit
Power Supply and Basic Analog Signal Processor

Overview

The SCAN-A-LINE™ General Processing Unit - Model GPU is a basic processor designed to provide operating power, a convenient enclosure and interface point for a host of Harris electronic circuit boards and sensors. There are five main configurations for the Model GPU:

Level 1: For use with single or dual EG-Series sensors ONLY; 0 - 10VDC Edge Position Analog Output.

Level 2: For use as a power supply for remote sensor mounting (Line Driver/Receiver).

Level 3: For use with single 10XAS-Series sensors; 0 - 10VDC Absolute Width Analog & ±10VDC Deviation Centerline Position Analog Output.

Level 4: For use with dual 10XAS-Series sensors; 0 - 10VDC Absolute Edge Position Analog & ±10VDC Deviation Centerline Position Analog Output.

Level 5: For use with dual 10XAS-Series sensors; 0 - 10VDC Absolute Edge Position Analog, ±10VDC Deviation Centerline Position Analog & 0 - 10VDC Width Analog Output.

Options

- **Absolute-to-Bipolar (ABC Option)**: For EG-Series sensors: Changes 0-10VDC signal to ±10VDC signal.
- **Auto-Zero (AZ Option)**: For 10XAS-Series sensors: Sets any strip position as a reference position (Levels 4 & 5).
- **Bargraph Display (BGA Option)**: Visually represents difference between a predetermined strip position and the detected strip position. Includes annunciators and limit relays.
- **Line Driver (LDR Option)**: Converts sensor signals for routing to another SCAN-A-LINE™ processing unit up to 3000’ [914m].
- **4/20 Current Loop (4/20 Option)**: Converts 4/20mA Current Loop routes analog signals from Model GPU over long distances. Single or Dual configuration available.
- **First Edge Video (FEV Option)**: Pre-processor to detect the first edge viewed, ignoring all other edges.

Features

- Compatible with SCAN-A-LINE™ EG-30A & 10XAS Sensors
- Various Analog Outputs on All Units except Level Two (type of output dependent upon unit model level).
- Left/Right Limit Relays Available (requires optional Bargraph Display – BGA Option).
- Switching Power Supply (±12VDC regulated for sensors and 5VDC regulated for logic circuits) and signal routing for up to two SCAN-A-LINE™ sensors. System Power: Universal 90 - 240VAC UL1950, FCC Class C.
- Model GPU Enclosure Dimensions: NEMA-style Steel 12” [305mm] wide x 14” [356mm] tall by 6” [152mm] deep.
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Model GPU Level 2 Dimensions
(dimensions typical for all levels of Model GPU)

Model GPU Level 3

Model GPU Level 5 with Bargraph Display & Auto-Zero