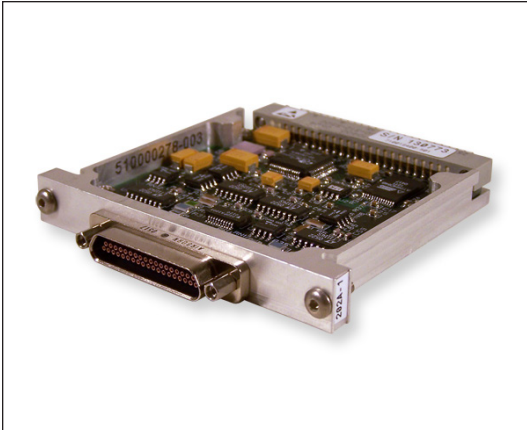


2-Channel Synchro/Resolver Signal Conditioning Module



Applications

- Flight Test Measurements
- Position Measurement
- Angular Measurements

Features

- 2-Channel Synchro/Resolver Module
- Accepts 3-Wire Synchro or 4-Wire Resolver Formats
- Utilizes Electronic Scott-T
- High Performance Ratiometric Tracking
- 10-bit/12-bit/14-bit/16-bit Resolution
 - Can be Read into PCM Format as Multiple Words
- 0.037% System Accuracy
- Windows XP/NT/2000 Software Included

Description

The PMSRD-102A is a 2-channel Synchro/Resolver digital conditioning module for use in TTC's PMEDAU-2000 or PMCDAU-2000 series products. The module is used to monitor 3-wire Synchro or 4-wire Resolver position data. Position data is digitized at up to 16-bit resolution for transmission in the system PCM output format. The module relies on an external reference source.

Revision 05/13/2015

PMSRD-202A Datasheet

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Specifications subject to change without notice.

Approved for Public Release 16-S-1155

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CAIS
Compatible



Management
System
AS9100C
ISO 9001:2008

PMSRD-202A – 2-Channel Synchro/Resolver Signal Conditioning Module

Technical Specifications

General Specifications

Supply Current: +15V @ 10 mA; -15V @ 10 mA; +5V @ 100 mA

Power Consumption: 0.8 Watts max

Operating Temperature: -35°C to +85°C (box ambient temp)

Storage Temperature: -55°C to +100°C

Dimensions and Mechanical

Compatibility: Operates in any PMEDAU/PMCD AU-2000 Series equipment

Weight: 1.8 oz (50 grams)

Unit Connectors: MDM-37S

Mating Connectors: Cannon™ MDM-37PH006LA174 or Airborn™ MM212-037-161-45WD

Backshell (optional): Airborn™ EMI/RFI MM-232-037-000-4100

Electrical Specifications

Input Configuration: 3-wire synchro or 4-wire resolver

Channels per Module: 2 independent channels

Reference Voltage: Factory set scaling for compatibility with 26 or 115 VAC (externally supplied reference) accomplished via connector wiring.

Reference Frequency: 50 Hz to 500 Hz

Signal Voltage: Factory set scaling for compatibility with 11.8 or 90 VAC; accomplished via connector wiring and software programming.

Signal Voltage Stability: ± 10% for rated accuracy

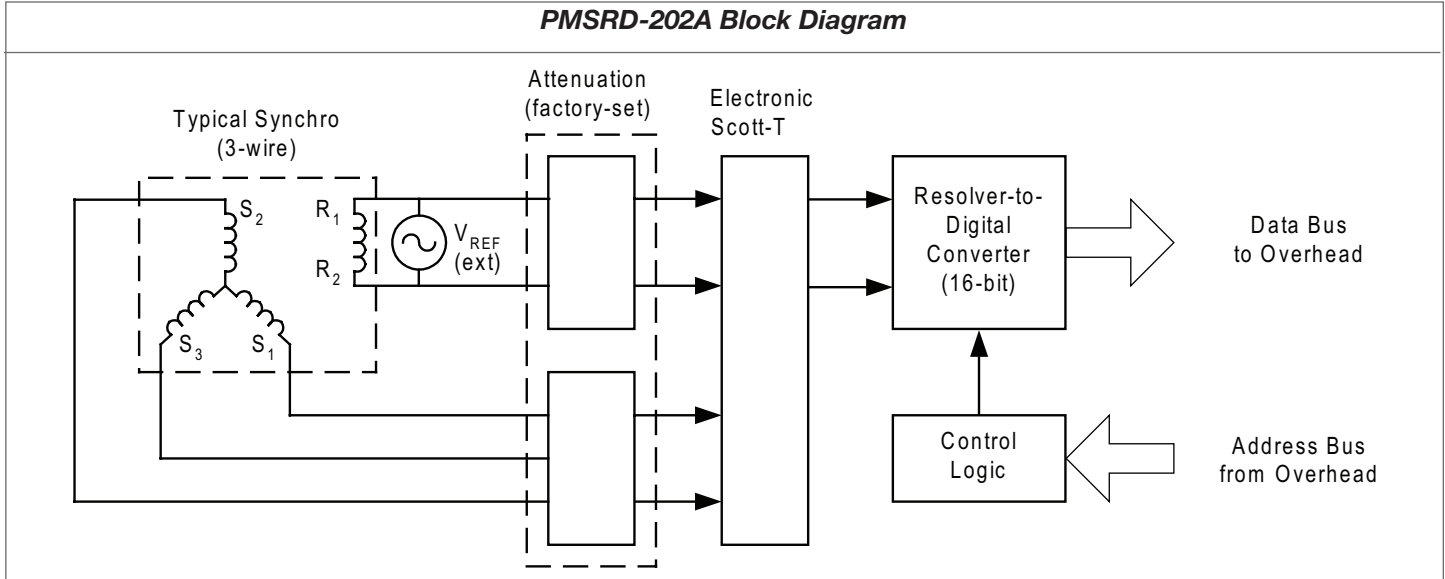
System Accuracy: ± 0.037% max over the operating temperature range

Data Encoding: Natural binary, 16-bit/14-bit/12-bit/10-bit resolution. Data can be read as a single word in the format (for systems operating at 16 bpw), or as two words in the format (for systems operating at less than 16 bpw).

Sample Restrictions: None

Tracking Rates: 12 RPS at 16-bit resolution; 48 RPS at 14-bit resolution; 192 RPS at 12-bit resolution; 768 RPS at 10-bit resolution

PMSRD-202A Block Diagram



PMSRD-202A Datasheet

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