

VME GPS CONDUCTION COOLED CCA

General Description

The Conduction Cooled VME GPS CCA functions as a VME host adapter carrier for both the Rockwell Collins GEM V and GEM VI, and the Trimble Force 524D military-qualified 24-satellite channel GPS SAASM receivers. The Conduction Cooled VME GPS CCA provides transparent access for VME single-board computers to the real-time GPS messages stored in the receiver's dual-port RAM.

The Conduction Cooled VME GPS CCA performs A24/A32, D16 slave transactions over the VME backplane, also generating VME interrupts for dual-port RAM message availability, time mark, and 1 pulse per second notification from the GPS receiver. In addition, either of the SAASM receivers supports both RS422 or RS232 serial GPS communications through the board's VME P2 connector.

The VME GPS CCA's PowerPC 405 processor and single 802.3-compliant Ethernet port provide a full-featured navigation solution in a single VME card slot. The entire dual-port RAM GPS message set is transparently accessible over the Ethernet port, using either TCP/IP or UDP protocol.

User software applications for the PowerPC 405 are uploaded over the Ethernet and stored in on-board flash memory. The Conduction Cooled VME GPS CCA has a total of 16 MB of flash memory and 32 MB of SDRAM.

The Conduction Cooled VME GPS CCA comes with a full 1-year warranty.

| Environmental Specifications | Range | Standard |
|------------------------------|---------------------------|-------------|
| Operating Temperature Range | (-)40 to (+)85 degrees C | MIL-STD-810 |
| Storage Temperature Range | (-)55 to (+)95 degrees C | MIL-STD-810 |
| Relative Humidity Range | 5% to 95%, non-condensing | MIL-STD-810 |
| Operational Shock | 35 g, half-sine, 3 msec | MIL-STD-810 |
| Operational Vibration | 2 Hz to 2 kHz | MIL-STD-810 |

| Physical Specifications | |
|-------------------------|--|
| Dimensions | Form factor: VME 6U (160 mm x 233 mm) |
| Weight | 12 oz. w/o receiver |
| Connectors | <ul style="list-style-type: none"> Two 96 position VME bus connectors SMA coax connector for GPS Satellite RF Input Signal Twenty pin Micro-D for Crypto-Key and status LED drive signals |

| | |
|--------------------------------------|-------------------|
| Typical Power (without GPS Receiver) | Less than 6 watts |
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VME Host Adapter for Military-Qualified 12/24-Satellite Channel GPS Receiver with Selective Availability Anti-Spoofing Module (SAASM)

| Ordering Information | Available Part No. | | |
|----------------------|--------------------|---|-----|
| VME GPS CCA | 510000- | W | 3 O |

| W | GPS Receiver Options |
|---|-------------------------|
| 1 | No Receiver |
| 2 | Trimble Force 5GS |
| 3 | Trimble Force 524D |
| 5 | Rockwell Collins GEM V |
| 6 | Rockwell Collins GEM VI |