

HQS-1PPS/NMEA

NMEA/1PPS Distribution Amplifier



Brandywine Communication's NMEA/1PPS Distribution Amplifier (HQS-1PPS/NMEA) is a small rugged, powered NMEA/1PPS distribution module mounted in a 4" x 4" x 2.5" environmentally secure enclosure. The HQS can provide an MTBF up to 1 million hours depending on configuration.

The HQS-1PPS/NMEA was developed to facilitate long cable runs of both 1PPS and RS422 signals for ships or aircraft requiring these timing reference signals at multiple locations. With the tested, ruggedized enclosure the HQS-1PPS/NMEA can be placed in difficult environments and difficult to reach places on ships and aircraft. The unit may be configured for single ended or differential signals as required for the application (factory configured). Various power options are also available upon request. Designed for "fit and forget" operation, the compact, reliable module provides an elegant solution for distribution of the timing references from an embedded military GPS receiver.

Applications

- Flight Test
- Aircraft Data Collection
- Flight Instrumentation
- UAV Applications
- Shipboard Applications

FEATURES

- **Six way signal distribution of Have Quick and 1PPS signals**
- **Compact Ruggedized Chassis**
- **Qualified for Shipboard and Airborne Operation**
- **MTBF up to 1 million hours**
- **Compact Chassis**

Key Benefits

- Compact Sealed Operation
- High reliability: MTBF > 1,000,000 hours
- Flight Qualified

Specifications

Signal Input

Connector Type: D38999/20WB35PN

1PPS:

Amplitude: 0-10V per ICD-GPS-060
Impedance: 50ohm

RS422:

Amplitude: 0-5V per ICD-GPS-060
Impedance: 2kohm

Signal Output

Connector Type: D38999/20WB35SN

1PPS:

No of Outputs: 6
Amplitude: 0-10V per ICD-GPS-060
Impedance: 50ohm

RS422:

No of Outputs: 6
Amplitude: 0-10V per ICD-GPS-060

Power Input

Connector Type: D38999/20WA98PN

Input Voltage: 15 VDC to 36 VDC

Power Consumption:

<5 Watts

Physical

Size

3.94"x3.94"x2.36" w/o connectors

3.94"x5.8"x2.36" incl. connectors

Reliability

MTBF

>1,000,000 hours

Environmental

EMI

MIL-STD-461 CE102, CS101, CS114, CS116, RE101, RE102, RS101, RS103

Relative Humidity

95% RH non-condensing

Temperature

Operating 0 to +50°C

Non-Operating -40 to +84°C

Air Pressure

Up to +30,000 feet

Fungus & Salt/Fog

Conformally Coated

Settling Dust

Base material coatings and surface treatments resilient to erosion.

Operational Vibration

Shipboard Type I MIL-STD-167-1A

Transportation Vibration

MIL-STD-810F Method 514, Procedure I Categories 4, 7, 8, and 10.

Shock

MIL-STD-810F [3] Method 516 20g/15ms saw tooth pulse.

Ordering Options

001-0279

001-0282

001-0311

001-0411

001-0417

001-0428

001-0430

001-0431

001-0438

MODULE, HQ DISTR., 2 WAY, 162VDC

MODULE, HQ/1PPS DIST., 6 WY, 15-28V

MODULE, HQ/1PPS DIST., 6 WY, 15-28V

MODULE 1PPS 6 Output ITR 15-28VDC

MODULE, 1PPS DISTR., 6 WAY, 15-36V

SPLITTER, HQ/1PPS DIST 6WY 15-28V R

SPLITTER, HQ/1PPS DIST 6WY RUGGED

SPLTR, HQ/1PPS DIST6WY STRETPULSE

HQ/1PPS 6 WY NO 50OHM REST, 15-28V

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