



PowerNet™ RS-422 to Synchro Converter

The IXI Technology PowerNet™ RS-422 to Synchro converter allows a AN/WSN-7 ring laser gyroscope inertial navigation system with RS-422 output to communicate with devices that require Synchro inputs such as the C-band AN/SRQ-4 radio terminal set.

The unit accepts the RS-422 data as input from the AN/WSN-7, performs a translation of the data, and then outputs the information as analog signals. The roll and pitch angle analog outputs conform to a three-wire synchro, two speed 18CX4D source, with a 0.5-degree maximum error.

The reference phase output conforms to a two wire 115V, 400 Hz, single phase alignment in accordance with MIL-STD-710 and MIL-HDBK-225. The PowerNet™ converter operates using 110VAC-220VAC, single phase power at 50-440Hz.

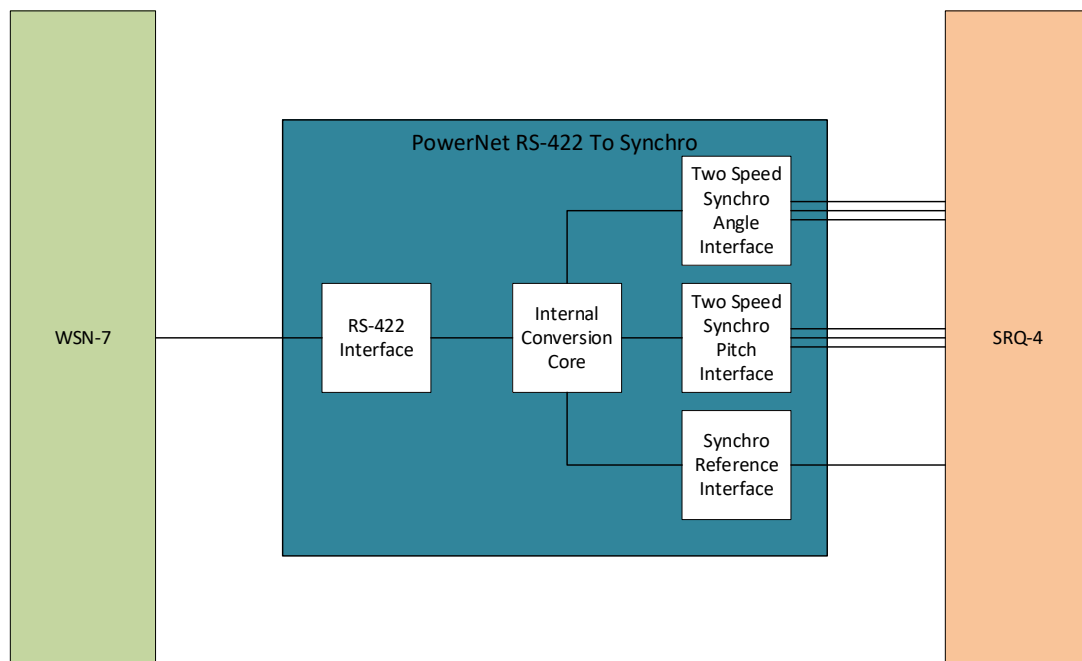


Figure 1: PowerNet™ RS-422 to Synchro Converter Block Diagram

The unit is designed to the following shipboard environmental requirements:

- Power MIL-STD-1399 Type I Single Phase Power, Paragraphs 5.2.4, 5.3.1, 5.3.2
- Temperature MIL-STD-810 Operating: 0 to +50 C, Non-operating -25 to +65 C
- Humidity MIL-STD-810 95% (non-condensing), 25 to 40 C
- Altitude MIL-STD-810 15000 ft.
- Drip MIL-STD-810 15°
- Shock MIL-DTL-901 Grade B
- Vibration MIL-STD-167-1A Type I 4-25 Hz
- EMI MIL-STD-461 CE102, RE101, RE102
- Airborne Noise MIL-STD-1474D, Requirement 5



Figure 2: PowerNet™ RS-422 to Synchro Converter