

CYIENT



MONOPULES COMPARATOR UNIT

Overview

Cyient's Monopulse comparator unit is a quadrant combiner and generates sum, delta for azimuth, elevation and range information and built for AESA radar applications.

Key Features

- Number of output Channels: 4 (Sum/Del Az, Del EL and Field BITE_OUT)
- Input VSWR at all four ports: 1:1.8 (max) at room temperature (Typ:250C)
- Output VSWR at all four ports: 1:1.8 (max) at room temperature (Typ:250C)
- SMA connectors for RF input and output
- Amplitude Variation across frequency: ± 1.0 dB
- Relative phase of sum port: ± 60 (Q1 to Q4) (Typ:250C)
- Relative Phase of Azimuth difference channel: 1800 ± 60 (for Q2 & Q3) at room temperature (Typ:250C)
- Relative Phase of Azimuth difference channel: 00 ± 60 (for Q1 & Q4) at room temperature (Typ:250C)
- Relative Phase of Elevation difference channel: 1800 ± 60 (for Q1 & Q2) at room temperature (Typ:250C)
- Relative Phase of Elevation difference channel: 00 ± 60 (for Q3 & Q4) at room temperature (Typ:250C)

Technical Specifications

- Frequency of operation: 9- 10 GHz
- Input Power level of Tx Drive: 6 dBm (Typ)
- Rx Gain in each channel: 20 ± 2 dB
- DC Input: 28V and power consumption 25W max(@ 20% Duty)
- Duty cycle: 20% Maximum
- EMI/EMC: As per MIL-STD-461E
- MTBF: More than 60000 Hrs. at room temperature (Typ:250C)
- Operating Temperature: - 40o C to + 65o C
- Storage Temperature: - 55o C to + 85o C
- Dimensions: 190 mm X 80 mm x 40 mm
- Weight: 600 grams

Benefits

- Very good sensitivity; with a frontend module
- Can support waveforms FH, OFDM with QAM and CPFSK

Cyient (Estd: 1991, NSE: CYIENT) is a global engineering and technology solutions company. As a design, build, operate & maintain partner for leading organizations worldwide, we take solution ownership across the value chain and leverage the power of digital technologies and advanced analytics, along with domain knowledge and technical expertise, to solve complex business problems. With more than 16,000 employees in 20 countries, our industry focus includes aerospace and defense, medical, telecommunications, rail transportation, semiconductor, industrial, and energy.