INTRODUCTION

RAL82 is an airborne system used to track the earth terrain and calculate the aircraft's altitude by transmitting a radar pulse and computing the pulse echo time. Its modular architecture allows the integrity level to be adapted to the necessities of each platform. The system has been designed to meet aircrafts, helicopters and trainers' requirements.

FEATURES

- Enhanced tracking performance even in case of severe manoeuvres in roll and pitch.
- Immunity to multi path
- Jamming resistance
- Interface flexibility
- Easy integration
- Easy maintenance
- Analogue signal for autopilot

SPECIFICATIONS

- Operational specification
- Operational Temperature: -40 to +71ºc
- EMI/EMC: According to MIL-STD-461/462
- Environmental condition: According to MIL-STD-810F
- Dimension: 337*194*125 mm
- Weight: 6.1Kg
- Antenna Weight: 0.5Kg
- Tracking Capability up to 2000 Feet/Sec
- Transmitter Frequency 4.3 GHz
- Local Oscillator Frequency 4.3 GHz
- Transmitter Pulse Width (0 to 1000 Feet) 20±15nSEC
- Transmitter Pulse Width (1000 to 5000 Feet) 130±25nSEC
- Transmitter Peak Power (0 to 1000 Feet) 25to 100 watts
- Transmitter Peak Power (1000 to 5000 Feet) 100 to 300 watts
- Pulse Repetition Frequency 10 KHz
- Receiver Band Width (0 to 1500 Feet) 30 MHz
- Receiver Band Width (1500 to 5000 Feet) 10 MHz
- Antenna Pattern (at half-power points)
- Pitch or roll (H and E plane) 35º
- VSWR (4.3GHz) 1.2:1.0
- Gain (4.3GHz) 13db
- Altitude Accuracy ±5feet+3% of actual altitude
- Height indicator Slew time: 2sec, Sensitivity less than 0.2Scale degree,
- Accuracy ±0.9 scale degree
- Power requirements 115(+4,-8), 400Hz (±20)
- P.F. =0.9, 100VI, 28VDC