AZELLE



QUAD MODULAR DRIVE-STUDY RECEIVER SYSTEM

GAZELLE™ is a high performance, modular receiver system that utilizes a high speed bus containing up to 4 independent receiver modules all simultaneously logging the RF energy needed to plot out coverage maps. Gazelle™ is designed from the ground up to provide hot-swappable receiver modules for in-the-field installation and includes an internal 12-channel/satellite GPS receiver. Gazelle's unique, modular high-speed receivers exceed the distance based averaging required to meet 40 lambda criteria essential for critical propagation analysis. The Gazelle is a low-cost test system ideal for advanced pre-buildout



GSM

WiMAX

Cellular

ISM

FEATURES

- Multiple band support including WiMAX, LTE, GSM, LMR, PCS, ISM, WCS, AWS & more
- Quad modular receivers allow users to swap various bands while in the field
- High measurement rate over Dr. Lee's recommended 40 lambda
- Internal 12-channel/12 satellite GPS receiver with active antenna
- Custom user-created channel lists
- User selectable sampling rates and IF bandwidth
- Captured data output via USB ports for connectivity to any PC







QUAD MODULAR DRIVE-STUDY RECEIVER SYSTEM

FREQUENCY RANGE 120 MHz - 6000 MHz (CW only)

Stock sub-band receivers: 120-180 MHz, 12/6 kHz IF BW 400-500 MHz, 12/6 kHz IF BW 690-810 MHz, 12/6 kHz IF BW 810-960 MHz, 12/6 kHz IF BW

GENERAL SPECIFICATIONS

Frequency Resolution: 250 Hz

Frequency Accuracy: ± 1.5 ppm internal reference, Aging: ± 1 ppm per year

Dual Conversion: 433 MHz first IF, 455 kHz second IF

IF Bandwidth: 6 kHz, 7.5 kHz, 10 kHz, 12 kHz, 15 kHz, 20 kHz, 25 kHz, 30 kHz

(each Receiver has 2 selectable IF filters)

Sensitivity: -120 dBm for SNR 5 dB and 12 kHz IF BW

Adj. Chan. Rejection: >45 dB

Stability: ± 0.25 PPM from 0 to 50 degrees C
Phase Noise: 10 kHz offset -89 dBc typical
100 kHz offset -115 dBc typical

1 MHz offset -115 dBc ty

Noise Figure: 7 dB typical for 12 kHz IF BW and 5 dB SNR

Image Rejection: 80 dB typical, 50 dB minimum Adjacent Channel Rejection: 50 dB typical, 40 dB minimum

Measurement Range: -120 dBm to -30 dBm, 0.1 dB resolution

Accuracy: ± 1 dB, -30 dBm to -105 dBm

± 1.5 dB, -106 dBm to -120 dBm

RF Input: SMA 50 Ohms, 1.8:1 VSWR maximum

Maximum RF Input without Damage: +13 dBm

LO Level at RF Input: -70 dBm maximum

Operating Temperature: -5 degrees C to 45 degrees C Relative Humidity: Up to 90%, non-condensing

Remote Interface: USB Port. RJ-45

GPS Receiver: Internal 12-Channel/Satellite Differential GPS Navigation with active antenna

Power: External 12-16 VDC @ 1000 mA

Weight: 9 lbs. fully loaded
Dimensions: 4" H x 10" W x 12" L

INCLUDES

Antenna: SMA (50 ohms)
DC Power Supply: 12 VDC @ 5 Amps

PC Software: Gazelle Control PC Software

OPTIONS

Custom frequency bands available upon request

