



FEATURES

- Direct Sampling of FM RF Carrier
- Frequency Agile RF Input
- AM & Sync AM Noise Measurements
- Variable BW Digital IF Filtering
- Digital FM Demodulation with 100 dB 75 μ s SNR
- Variable BW Composite Filtering
- Digital Stereo Demodulation with 100 dB L / R Separations
- Full Metering of Analog Peak and RMS Values
- RDS Injection/Phase and Full Data Decoding
- Two Digital SCA Decoders
- RF, Composite and Audio FFT Spectrum Analysis
- RJ - 45 Ethernet Interface with Remote PC Software

SPECIFICATIONS

RF Inputs

Frequency Range 88 to 108 MHz, Frequency Agile
50 kHz Increments
High Level Input 0.5 to 5 Vrms, 50 Ω , BNC Connector
Antenna Input 100 μ V sensitivity, 75 Ω , F-Type Connector

FM Demod

Frequency Response ± 0.01 dB, 10 Hz to 100 kHz
SNR 100 dB, 75 μ s de-emphasis
Distortion 0.001%, 75 μ s de-emphasis

Stereo Decoder

Frequency Response (L and R) ± 0.1 dB, 10 Hz to 15 kHz
SNR (Stereo) 90 dB, 75 μ s de-emphasis
Distortion 0.001%, 10 Hz to 15 kHz, 75 μ s de-emphasis
Separation
L to R, R to L 100 dB, 10 Hz to 15 kHz
Crosstalk
L+R to L-R 100 dB min
L-R to L+R 100 dB min
SCA to L+R 100 dB min
SCA to L-R 100 dB min

FFT Spectrum Analysis (RF, Composite, Audio)

Display Modes Realtime, Peak Hold, Average, Infinite Hold

Amplitude

Number of Points 150
Scale +100.0 to -150.0 dB adjustable
Resolution 0.1 dB

Frequency

Number of Points 501
Resolution BW
RF 25, 50, 100, 250, 500, 1000, 1500 Hz
Composite 5, 10, 25, 50, 125, 250 Hz
Audio 1, 2, 5, 10, 25, 50 Hz

Metering

Modulation (Peak, Ave, Min)

Total, L, R, L+R, L-R 0 to 150%, 0.1% resolution
Pilot 0 to 15.0%, 0.1% resolution

RMS

Total, L, R, L+R, L-R ... +10.0 to -120.0 dB, 0.1 dB resolution
Flat & 75 μ s
AM Noise, Sync AM Noise . . . 0.0 to -100.0 dB, 0.1 dB resolution
Separation 0.0 to -120.0 dB, 0.1 dB
Crosstalk 0.0 to -120.0 dB, 0.1 dB resolution

Indicators

Total Peak Modulation • Pilot Presence • RDS Sync & Presence • SCA #1
Peak and Presence • SCA #2 Peak and Presence • AM Noise Limit • SYNC
AM Noise Limit

Composite Outputs

Analog (2 buffered) 1.5 Vrms @ 100%, 75 Ω unbalanced
BNC Connector
Digital (2 buffered) LVDS, 100 Ω , RJ-45 Connector

Audio Outputs

Analog Outputs (4 assignable) 5 Vrms, 75 Ω unbalanced
BNC Connector
Analog Outputs (4 assignable) +10 dBm, 600 Ω balanced
XLR Connector
AES-3ID (6 assignable) 1.0 Vpk-pk, 75 Ω , BNC Connector
Headphone (assignable) 1/4" Phone Jack

Alarm Outputs

Relays (4 assignable) ... FORM C, 15-pin Female D-Sub Connector

Computer Interface

RS-232 9-pin Male D-Sub Connector
Ethernet 10/100 Base -T RJ-45 Connector
Dimensions 2 EIA Rack Unit
Power Requirements 40 Watts, 90-264V
50/60 Hz
Shipping Weight 12 lbs

Specifications are subject to change without prior notice.



BELAR ELECTRONICS LABORATORY, INC.

119 LANCASTER AVENUE • P.O. BOX 76 • DEVON, PA 19333-0076 USA

VOICE (610) 687-5550 • FAX (610) 687-2686

<http://www.belar.com/> • sales@belar.com • service@belar.com • parts@belar.com