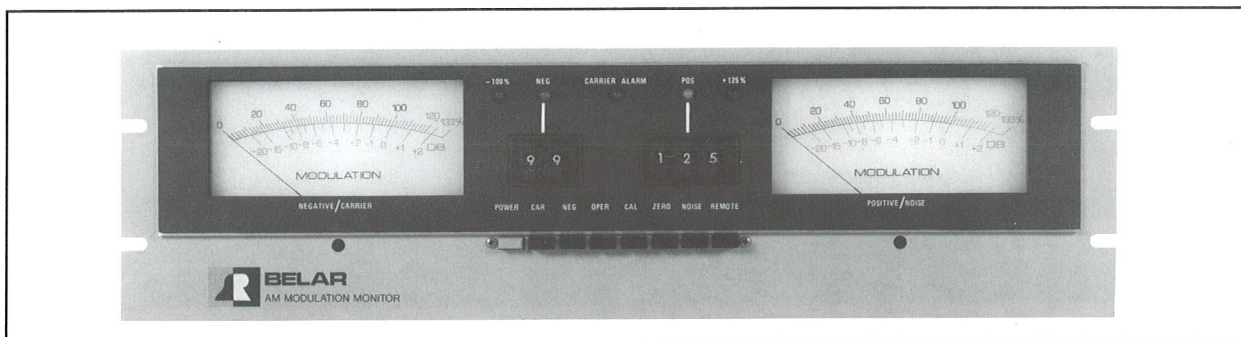




DESCRIPTION

The Belar AMM-3A Modulation Monitor is a precision, all solid-state AM demodulator designed to measure the modulation characteristics of AM broadcast transmitters over a frequency range of 260 kHz to 50 MHz. The monitor employs a unique analog divider circuit—maintaining the accuracy of all modulation indications despite changes in carrier level. Two meters provide simultaneous indications of positive and negative modulation. Positive and negative modulation peaks are simultaneously indicated on two thumbwheel-programmable peak indicators, as well as individual fixed negative 100% and positive 125% modulation peak indicators. The AMM-3A provides meter indications of relative carrier level and AM noise. A built-in calibrator checks the accuracy of modulation readings. Remote outputs are provided for all modulation indications and the carrier level.

FEATURES

- Two modulation meters for simultaneous measurement of positive and negative modulation
- Two adjustable peak modulation indicators, thumbwheel programmable from 1–99% negative and 1–199% positive modulation.
- Separate, dedicated 100% negative and 125% positive peak indicators
- All modulation indications independent of carrier level
- Semi-peak reading modulation meters respond accurately to short duration program peaks
- Built-in Carrier Level Limit (Loss) and Modulation Level Alarms with dry relay contact outputs
- Built-in modulation calibration check
- Linear-phase detector filter provides accurate modulation indications without overshoot.
- Switchable NRSC de-emphasis

SPECIFICATIONS

RF Frequency Range 200kHz to 50 MHz
 RF Sensitivity 5 Vrms to 10 Vrms
 RF Input Impedance . . . 1000Ω standard, 50Ω optional
 RF Input Rear-panel BNC connector
 Positive modulation meter range 0% to 133%
 Negative modulation meter range 0% to 100%
 Accuracy ±2%
 Peak Modulation Indicators:
 Negative peak range . 1% to 99% in 1% increments
 Positive peak range . 1% to 199% in 1% increments
 Fixed Indicators -100%, +125%
 Accuracy ±2%
 Frequency Response +0.0 dB, -0.5 dB, 20 Hz to 15 kHz
 Envelope Pulse Response Overshoot <1%
 Modulation Level Alarm Adjustable threshold,
 fixed timeout (~30 seconds)
 Carrier Level Meter Range 0% to 133%
 Carrier Limit (Loss) Alarm . . . Lower limit and upper limit
 Audio Monitoring Output +10 dBu (2.45 Vrms),
 600Ω active-balanced
 Audio Test Output (proof of performance) 5 Vrms,
 rear-panel BNC connector
 Auxiliary Detector Output 5 Vrms
 Audio Response . . . +0.0 dB, -0.5 dB, 20 Hz to 15 kHz
 (detector response -3 dB at 50 kHz)
 Distortion 0.25% maximum at 95% modulation
 Signal-to-Noise Ratio ≥80 dB (de-emphasis out)
 AM Noise Level Metering Range . . . -40 dB to -70 dB
 Remote Outputs:
 Adjustable negative and positive peak indicators,
 -100% and +125% peak modulation indicators;
 positive and negative remote modulation meters,
 carrier level meter, modulation level alarm,
 carrier limit (loss) alarm
 Operating Temperature 0°C to +50°C
 Power Consumption . . . 6 watts, 100–240 V, 50–60 Hz
 Dimensions . . 5¼"H × 19"W × 8½" D (EIA rack mount)
 Shipping Weight 12 lbs. (5.5 kg)

Specifications are subject to change without prior notice.



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Where Accuracy Counts . . . Count on Belar

Manufactured in the U.S.A.