



BELAR

"When accuracy counts, count on Belar."

BELAR AM MODULATION MONITOR, MODEL AMM-2C



DESCRIPTION

The Belar AMM-2C 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 AMM-2C utilizes a unique carrier-referencing system for the peak flasher indications. Peak flasher accuracy, as well as modulation alarm sensitivity, is independent of carrier level over more than a $\pm 30\%$ range. A built-in calibrator checks the accuracy of modulation readings. Isolated outputs are provided for the built-in modulation and carrier level alarms. Remote outputs are provided for all modulation indications as well as the carrier level.

FEATURES

- Separate 100% negative and 125% positive peak modulation indicators
- Peak indicator, modulation range from 40% to 130%, switchable polarity
- All peak indicators independent of carrier level
- Semi-peak-reading modulation meter responds accurately to short duration program peaks
- Built-in Carrier Level (Loss) and Modulation Level Alarms, both with dry relay contact outputs
- Built-in Modulation Calibration check
- Linear-phase detector filter provides accurate modulation indications without overshoot
- Switchable NRSC audio de-emphasis

SPECIFICATIONS

RF Frequency Range	260 kHz to 50 MHz
RF Sensitivity	5 Vrms to 10 Vrms
RF Input Impedance	1000 ohms std. (50 ohms opt.)
Modulation Meter Range	0 to 133% (switchable to either positive or negative modulation)
Fixed indicators	-100%, +125%
Adjustable peak indicator	range: 40% to 130%
Modulation Accuracy	± 2%
Envelope Pulse Response	Overshoot <1%
Modulation Level Alarm	Adjustable threshold, fixed timeout (-15 seconds)
Carrier Level Deviation Meter Range	± 30%
Carrier Level (Loss) Alarm	Alarms with a 30% drop from nominal carrier level
Audio Monitoring Output	+10 dBu (2.45 Vrms), 600 ohm, 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)
Harmonic Distortion	0.25% maximum at 99% modulation
Signal-to-Noise Ratio	>80 dB (de-emphasis out)
Remote Outputs:	Adjustable, +125%, -100% peak modulation indicators; auxiliary detector, carrier reference, remote modulation meter, remote carrier level meter, modulation level alarm & carrier level (loss) alarm
Operating Temperature	0°C to +50°C
Power Consumption	6 watts, 100-240 V, 50-60 Hz
Dimensions	5¼" H ´ 19" W ´ 7" D
Shipping Weight	10 pounds (4.5 kg)