







M O D E L 831C - L O W N

LOW NOISE LEVEL MEASUREMENT SYSTEM

- No external power supply required
- 10 Hz to 16 kHz frequency range
- Highly portable
- Low power (4 mA ICP®)
- Single channel

TYPICAL APPLICATIONS

- Product testing
- Environmental noise
- R&D
- Anechoic chamber testing

6 dB A-WEIGHTED NOISE FLOOR

Easily measure very quiet sounds using the SoundAdvisor™ Sound Level Meter Model 831C paired with the Model 378A04 Low Noise Microphone and Preamplifier. Due to the innovative design of the 378A04, which uses a prepolarized microphone and ICP® (constant current) interface, the combination produces a highly portable system that is battery-powered and intuitive to use.

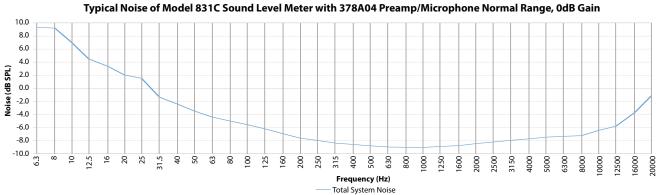
The Model 831C-LOWN configuration is ideal for measurements where noise levels are extremely low, such as very quiet soundscapes and quiet machines.

Because the 831C-LOWN consists of the popular SoundAdvisor™ Model 831C paired with the 378A04 low-noise microphone, it can be used with the wide range of 831C accessories. For example, use with the DVX012 Ethernet dongle to provide network connectivity or the SoundAdvisor Portable Noise Monitoring System Model NMS044 to create a low-noise portable monitoring solution.



831C-LOWN S	PECIFICATION	S	
Calibration		Requires 94 dB re 20 µPa calibrator such as CAL200	
Self-generated No	ise (typical)		
Weighting		0 dB Gain	
A		5.5 dB	
С		10 dB	
Z		18 dB	
Alkaline Battery Life		Decreased approx 15% when using 378A04	
831C-LOWN Inclu	ded Items		
831C	Model 831C Sound Level Meter		
831C-ACC	Accessory kit for Model 831C		
ADP074	Adapter for ICP® input (BNC)		
378A04	Low noise ICP® microphone and preamplifier		
012A10	BNC cable, 10 ft (3 m)		
BNC M-M	BNC male to male connector		
ADP032	Adapter to mount ½ inch preamplifier to tripod (1/4-20 thread)		
Ordering Informat	tion		
831C-LOWN	Low noise system including Model 831C, 378A04 low noise microphone & preamplifier and accessories		
Optional Accesso	ries		
CAL200	Class 1 acoustic calibrator, 94 or 114 dB at 1 kHz (The 378A04 must be calibrated at 94dB)		
PRM831-FF	PRM831 preamplifier with free field microphone (377B02)		
PRM831-RI	PRM831 preamplifier with random microphone (377B20)		
TRP001	Tripod with ADP032 for mounting ½ inch preamplifier		
Software			
SWW-DNA	Software and USB dongle for evaluation and reporting		
SWW-DNA-831	Instrument driver for SWW-DNA to provide control, live display, and data translation from Model 831		

Acoustic			
Acoustic	450 m	450 mV/Pa	
Sensitivity	100	-7 (±2 dB) re 1 V/Pa	
Frequency Range		10 to 16,000 Hz	
Inherent Noise	< 6.5 (5.5 typica	< 6.5 (5.5 typical) dB re 20 μPa	
	Level (dB re 20 μPa)	Frequency	
3% Distortion Limit	100 dB	< 5 kHz	
	80 dB	> 5 kHz	
Environmental			
Operating Temperature	14 °F to 176 °F (-	14 °F to 176 °F (- 10 °C to 80 °C)	
Operating Humidity	0 to 99% relative hum	0 to 99% relative humidity, non-condensing	
Electrical			
Polarization	0	0 V	
Output Voltage	± 2 V peak	± 2 V peak maximum	
ICP constant current	4 to 20 mA (4 mA sup	4 to 20 mA (4 mA supplied by Model 831C)	
Physical			
Diameter with Grid	0.52 in (1	0.52 in (13.2 mm)	
Height with Grid	4.02 in (10	4.02 in (102.1 mm)	
Equalization Vent	Re	Rear	
Weight	1.8 oz (51	1.8 oz (51.3 grams)	
Maximum Sound Pressure	130 dB re 2	130 dB re 20 μPa peak	
Mechanical	Grid cap and microp	Grid cap and microphone not removable	







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