

Eta250 Ultra

optical microphone



moving sounds without moving parts

xarion
laser acoustics

Acoustic

Transducer type	Membrane-free, optical
Frequency range	10 Hz - 1 MHz
Dynamic range	100 dB
Self-noise	50 μ Pa (BW: 1 Hz, measured @ 1 kHz)
Self-noise, full bandwidth	50 mPa
Max. sound pressure for THD <3%	400 Pa
Max. sound pressure level for THD <3%	146 dB rel. 20 μ Pa
Damage threshold	>194 dB rel. 20 μ Pa
Sensitivity	10 mV/Pa @ 1 kHz (0 dB gain, 50 Ohm)
Polar pattern	Omnidirectional
Sound field optimization	Free field and pressure field
Calibration	Yes, standard calibrators (with adapter)

General

Sensor output	\pm 15V (high impedance), \pm 7.5V (50 Ohm)
Sensor output voltage connector	BNC
Size of sensor head	diameter: 5 mm; length: 33 mm
Weight of sensor head	10 g
Fiber cable length	5 m (other upon request)
Size of control unit	220 mm x 330 mm; height: 95 mm
Weight of control unit	8 kg
Power supply (signal conditioning unit)	230V \pm 10%; 50 / 60 Hz
Power consumption	< 50 W
Operating temperature: sensor head	5 °C to 60 °C (40 F to 140 F)