

Eta450 Ultra

Acoustic

Transducer type	Membrane-free, optical
Frequency range	50 kHz - 2 MHz
Dynamic range	100 dB
Self-noise	5 μ Pa (BW: 1 Hz, measured @ 500 kHz)
Self-noise, full bandwidth	10 mPa
Max. sound pressure for THD <3%	40 Pa
Max. sound pressure level for THD <3%	126 dB rel. 20 μ Pa
Damage threshold	>194 dB rel. 20 μ Pa
Sensitivity	100 mV/Pa @ 1 kHz (0 dB gain, 50 Ω)
Polar pattern	Omnidirectional
Sound field optimization	Free field and pressure field
Calibration	Adapter available for standard calibrators

General

Maximum output voltage	± 15 V (high impedance), ± 7.5 V (50 Ω)
Output impedance	50 Ω
Output connector	BNC
Sensor head dimensions	diameter: 8.8 mm; length: 35 mm
Sensor head weight	10 g
Fiber cable length	5 m (other upon request)
Signal conditioning unit dimensions	220 mm x 330 mm; height: 95 mm
Signal conditioning unit weight	8 kg
Power supply	230/120V $\pm 5\%$; 50/60 Hz
Power consumption	< 50 W

Environmental

Storage temperature	-20 $^{\circ}$ C to 80 $^{\circ}$ C (0 $^{\circ}$ F to 175 $^{\circ}$ F)
Operating temperature: sensor head	10 $^{\circ}$ C to 40 $^{\circ}$ C (50 $^{\circ}$ F to 100 $^{\circ}$ F)
Operating temperature: signal conditioning unit	0 $^{\circ}$ C to 50 $^{\circ}$ C (30 $^{\circ}$ F to 120 $^{\circ}$ F)
Environmental humidity	non-condensing