

Eta 100 Ultra

Acoustic

Transducer type	Membrane-free, optical
Frequency range	10 Hz - 1 MHz
Dynamic range	100 dB
Self-noise	1.5 mPa (BW: 1 Hz, measured @ 1 kHz)
Self-noise, full bandwidth	1.5 Pa
Max. sound pressure for THD <3%	12 kPa
Max. sound pressure level for THD <3%	176 dB rel. 20 µPa
Damage threshold	>194 dB rel. 20 µPa
Sensitivity	0.35 mV/Pa @ 1 kHz (0 dB gain, 50 Ohm)
Polar pattern	Omnidirectional
Sound field optimization	Free field and pressure field
Calibration compatible with pistonphone or calibrator	Yes, standard calibrators (with adapter)

General

Sensor output voltage	±15V (high impedance), ± 7.5V (50 Ohm)
Sensor output voltage connector (signal conditioning unit)	BNC
Sensor output impedance	50 Ohm
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 ± 10%; 50 / 60 Hz
Power consumption	< 50 W

Environmental

Storage temperature	0° C to 60° C (30 F to 140 F)
Operating temperature: sensor head	5° C to 60° C (40 F to 140 F)
Operating temperature: control unit	15° C to 30° C (60 F to 85 F)
Environmental humidity	non condensing