

# Eta100 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 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: 5 mm; length: 33 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	230/120 V ±5%; 50/60 Hz
Power consumption	< 50 W

## Environmental

Storage temperature	-20 °C to 80 °C (0 °F to 175 °F)
Operating temperature: sensor head	-20 °C to 100 °C (0 °F to 210 °F)
Operating temperature: signal conditioning unit	15 °C to 30 °C (60 °F to 90 °F)
Environmental humidity	non-condensing



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