



M508 HYDRUS SPECIFICATIONS

M508 HYDRUS TOWED ARRAY

OVERVIEW

The M508 Hydrus Towed Array is a thin line digital array. The array streams digitized acoustic and non-acoustic sensor data. Hydrus is a low noise, low drag, low power and lightweight array making it ideal for towing from an unmanned vehicle. Applications vary from marine surveillance, marine monitoring, and detection applications. The array and tow cable are neutrally buoyant to support low speed tow. Hydrus includes acceleration cancelling hydrophones to minimize mechanical noise.

The Hydrus array can also be customized with greater than 64 channels. The array is user configurable to less than 2.5 kHz sampling rate, and high/low acoustic channel gain to tailor performance to various applications. Non-acoustic sensors include depth, temperature, roll, pitch, and yaw.



KEY CHARACTERISTICS:

Acoustic:

Frequency Band	10 – 1135 Hz
# of Acoustic Channels	64
Acoustic Channel Sensitivity	-196 dB re V/ μ Pa
Acoustic Channel Capacitance	64 nF
Configurable Sampling Rate	Up to 2.5 kHz
Configurable Channel Gain	10 dB or 32 dB
Self Noise SPL Equivalent@1kHz	35 dB re μ Pa/ \sqrt Hz
Digital Interface	UDP over Ethernet

Mechanical/Electrical:

Operating/Survival Depth	300 m maximum
Nominal Array Diameter	45 mm
NAS Sensors	Depth, Temperature, RPY
Nominal Power Consumption	10 Watts
Supply Voltage	48 VDC
Array/Tow Cable Buoyancy	Neutrally buoyant
Tow Cable Length	Up to 50 m
Operating Temperature	0 – 40 °C