



## M311 Transceiver Board

The M311 Transceiver Board is a high power amplifier and low noise receive signal amplifier optimized for driving underwater transducers. The board contains a transmit/receive switch to allow two way communication with a single transducer for high frequency, high power applications.

The board features a step up transformer and matching inductor that can be optimized to drive any GTI transducer. The transmit and receive chains contain high and low pass filters that can be set to cover the desired operating band.



### M311 Transceiver Characteristics

Supply Voltage	+/- 28 V DC differential
Supply Current	150 mA Quiescent/Receive 5 A maximum (maximum transmit)
Operating Frequency	Up to 350 kHz
Receive/Transmit Filters	Low/high pass frequencies optional
Max Transmit Voltage	600 Vrms
Max Transmit Power	100 W
Receive Channel Gain	0, 10, 20, 30, 40 or 80 dB user selectable
Receive channel IRN	$< 10\text{nV}/\sqrt{\text{Hz}}$
Receive output voltage	20 Vpp (differential)
Transmit input voltage	+/- 10 Vpp
Transmit/receive switch transition time	$< 1\text{ ms}$
Storage Temperature	-40°C to +70°C
Operating Temperature	-20°C to +70°C
Dimensions	20 x 10 x 5 cm