Pole/Zero offers an integrated **AIS Splitter/Receiver** system in a rugged flange mount or DZUS chassis. The splitter taps off a path from an existing transceiver, auto-blanks the secondary path during primary high-power transmissions (fast attack, slow decay), and provides high selectivity bandpass filtering for receiver protection and interference mitigation. This **Splitter/ Receiver** enables maritime Automatic Identification System (AIS) monitoring from an existing VHF antenna path. In addition, an onboard converter provides RS-422 balanced outputs from unbalanced RS-232 inputs. Includes mounting accommodations for Smart Radio, Shine Micro and Protec receivers (wiring harnesses available).

This **Splitter/Receiver** supports frequency hopping or single channel tactical communications; SDR, test/measurement, and other applications needing multiple receive outputs and high power handling. Potential installations include avionics, UAVs, ground systems and vehicles, as well as shipboard or lab environments.

In addition to the AIS application, this splitter design can be tailored for other applications such as adding a Guard path to an existing antenna.
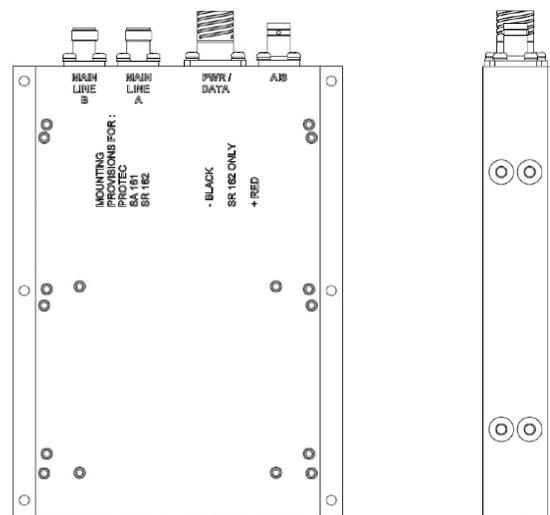
AIS Splitter

Specifications:

Part Number:	218000
Frequency Coverage:	30 to 512 MHz
Input/Output Impedance:	50Ω
VSWR:	1.5:1 typical
Mainline Insertion Loss, Isolated:	<0.5 dB
Mainline Insertion Loss, Shared Rx:	<1.0 dB
Transmit RF Power Handling:	100 W
Secondary Receive Frequency (1):	156.025 to 162.025 MHz
Secondary Receive Gain:	8 dB typical
Secondary Receive NF (w/ Split Loss):	14 dB typical
Secondary Receive Selectivity:	-65 dBc @ ±10 MHz
Transmitter-Secondary Isolation (2):	-50 dB
DC Input Power:	28 VDC, <250 mA
DC Output Power:	12 VDC, <250 mA
Temperature Range:	-40ºC to +55ºC
Size (excluding connectors) (3):	5.0 × 7.5 × 1.2 (in.) 65.405 × 146.05 × 215.392 (mm.)
Weight:	Approximately 24 oz. / .68 kg.

Note(s):　1. Other secondary frequencies are available upon request.
2. The secondary path is blanked when the transmitter frequency is close enough to cause non-linear effects.
3. DZUS package also available including mounting provision for AIS receiver.

Block Diagram:
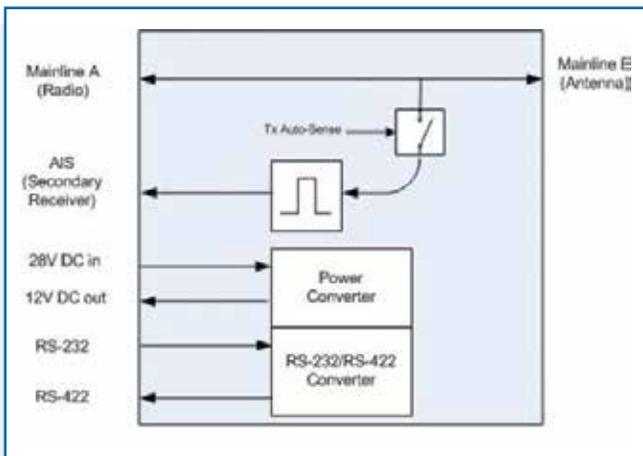
Mechanical Outline:

Note:　Flange mount shown