The Rocky Research Synchro System Module, **SSM1160**, is a two-channel synchro to digital conversion device. It allows a connection between legacy synchro systems and modern PLCs.

Rocky Research’s **SSM1160** contains advanced, custom electronics. The device is programmable for custom firmware, as well as field programmable. The hardware is designed with optional DeviceNet over Control Area Network (CAN) or RS-422 data outputs, and can support other communication protocols. This allows the device to support the DeviceNet protocol for communication with programmable logic controllers and other DeviceNet capable devices. DeviceNet interface allows communication over virtually any protocol. The SSM is able to accept either 2 channels of 1x synchro data or 1-36x channel. Additionally, the module has the capability to operate in 10 bit to 16 bit resolution. Currently the SSM-SD60/D only supports polled I/O operation in the DeviceNet configuration.

The **SSM1160** design incorporates Rocky Research’s expertise in ruggedization of high-density electronics; it is designed to operate effectively in the hostile environments found aboard Navy ships.
### System Specifications

**Inputs:**  
(2) channels of 5-wire 90 volt 60 Hz or 400 Hz 1x

**Outputs:**  
DeviceNet over CAN or RS-422  
Profibus via Anybus Gateway

**Power:**  
+12 to +24 V power and ground

### Physical Specifications

**Dimensions:**  
11” (L) X 6.7” (W) X 3.5” (H)

**Weight:**  
6.2 lbs

### Environmental Specifications

**Shock:**  
MIL-STD-901D, Grade A, Class I, Type A, Certified

**Vibration:**  
MIL-STD-167-1A, Type I Certified

**EMI:**  
MIL-STD-461E, Surface Ships Certified

**Humidity:**  
5% to 95% non-condensing  
Salt Fog

**Enclosure Protection:**  
IP67 / EN 60529

* Custom packaging options available *