SA-MOD-1-9-A-1S

Embedded L-Band Single Input Spectrum Analyzer Module

- Software-Defined-Radio

- Compact, Rugged Design

- Monitoring & Control (M&C) via Ethernet

- Integrates with Avcom's EVO-GUI or Comprehensive API

- Extended Temperature Range

- Low SWaP (Size, Weight, and Power)

The SA-MOD-1 spectrum analyzer is based on Avcom's software-defined-radio technology platform designed to exceed today's performance challenges. The analyzer is intended for embedded applications required to operate under challenging conditions.

Avcom's newest analyzer technology provides excellent performance by employing high-performance DSP, and FPGAs. Integrators can now embed a full-function spectrum analyzer in a very small volume into systems operating in austere and rugged environments.

Communication with the module is achieved via ethernet and Avcom's Graphical User Interface, the EVO GUI software. It provides a feature-rich set of functions to control, monitor & alarm, while recording and datalogging. The system can also be accessed via a POSIX-Compliant API, available from Avcom.

Versatile Remote-Control Software
The SA-MOD-1-9 can provide discrete remote monitoring and control from anywhere in the world. The SA-MOD-1- 9 is monitored and controlled using the Avcom Remote Control Software EVO-GUI via USB, or Ethernet. The EVOGUI has an intuitive user interface that is easy to use with no special training required. Up to sixteen windows can be displayed at one time. The Avcom GUI will run on the WINDOWS OS. The GUI is preconfigured for actual remote analyzers we keep online so that you can try the software before purchasing.

"Following the Signal", and listening to our customers, this series is perfectly suited to provide functionality in earth stations, teleports, and RF signal monitoring environments. The MOD Series of analyzers is an excellent addition to the Avcom family of products for demanding applications which require the extended performance characteristics, while still providing a low cost-of-ownership and a highly cost- effective and reliable product.
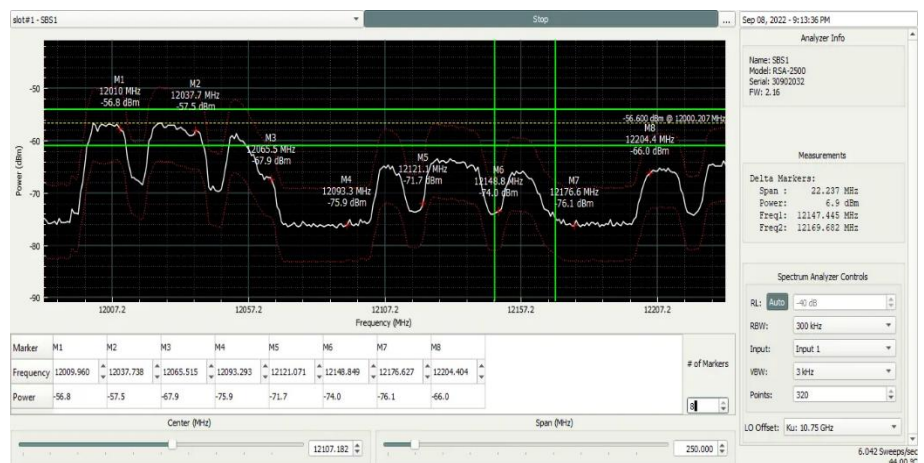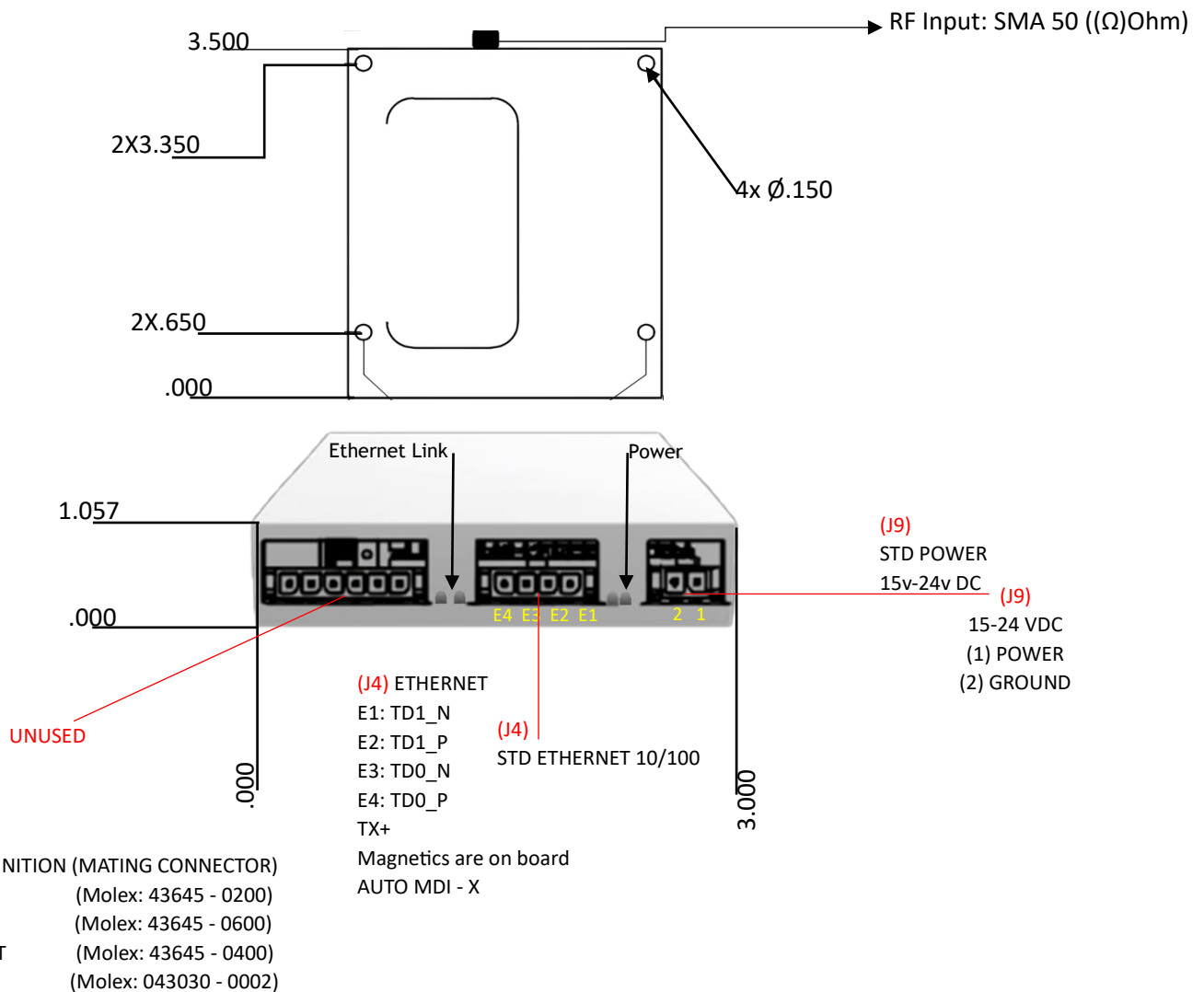
SA-MOD-1-9-A-1S - TECHNICAL SPECIFICATIONS DATA

PARAMETER	PERFORMANCE
FREQUENCY RANGE	900 – 2200 MHz
SPAN WIDTH	1200 MHz
RESOLUTION BANDWIDTH	1kHz, 3kHz, 10kHz, 100kHz, 300kHz, 1MHz
REFERENCE LEVELS	Selectable: -10dBm to -40dBm
SPURIOUS FREE DYNAMIC RANGE	50dB
AMPLITUDE ACCURACY	±1dB typical
SCALE PER DIVISION	10dB/div
USABLE INPUT RANGE	-100dBm to -10dBm
FREQUENCY ACCURACY	±1kHz typical
MAXIMUM RF INPUT	25VDC Max (DC blocked); -10dBm
INPUT IMPEDANCE	50Ω
RF INPUT CONNECTOR	SMA
INTERFACE CONNECTORS	Ethernet: 6-pin Molex. USB. Power: 2-pin Molex
POWER SUPPLY REQUIREMENT	15-24 VDC; < 3W
PHYSICAL DIMENSIONS (BOARD; ENCLOSED)	3" x 3.5" x 1.057"
HUMIDITY	0 to 95%, non-condensing
TEMPERATURE RANGES; OPERATING/STORAGE	-40 to +70 ˚C / -40 to +85 ˚C
OPERATING ALTITUDE RANGE	40,000 ft; 12,000m
WEIGHT	8 oz.; 200 g

SA-MOD-1-9-A-1S - Technical Specification Continued
PHYSICAL DIMENSIONS, CONNECTOR DESIGNATIONS AND USER DATA

RF Input: SMA 50 ((Ω)Ohm)

3.500

2X3.350

4x Ø.150

2X.650

.000

Ethernet Link   Power

1.057

.000

(J9)
STD POWER
15v-24v DC

(J9)
15-24 VDC
(1) POWER
(2) GROUND

E4 E3 E2 E1   2 1

UNUSED

(J4) ETHERNET
E1: TD1_N
E2: TD1_P
E3: TD0_N
E4: TD0_P
TX+
Magnetics are on board
AUTO MDI - X

(J4)
STD ETHERNET 10/100

.000

3.000

HEADER DEFINITION (MATING CONNECTOR)
J9: POWER   (Molex: 43645 - 0200)
J8: BR & AUX   (Molex: 43645 - 0600)
J4: ETHERNET   (Molex: 43645 - 0400)
Crimp Pin   (Molex: 043030 - 0002)

A dual-input version is available - SA-MOD-1-9-A-2S.