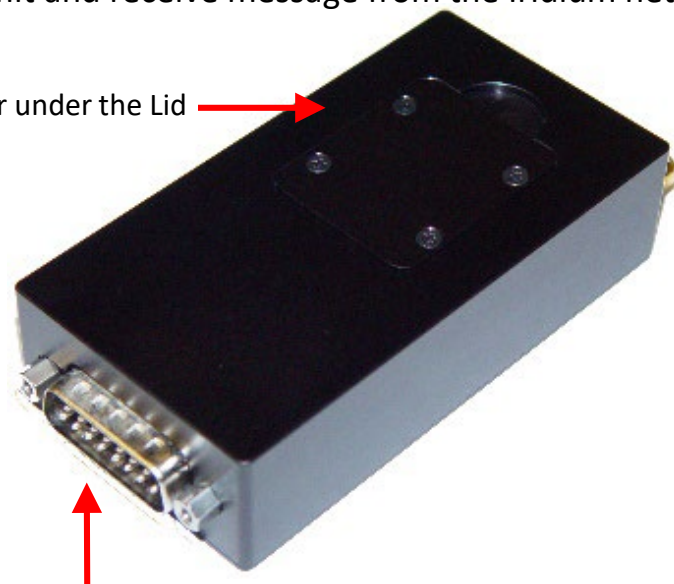


**DEVICE DESCRIPTION:** The A3LA-RS is a satellite modem comprised of an Iridium® 9523 transceiver. It supports SBD, SMS, dial-up data switch Direct internet connection (or NIPRNET connection), Direct internet connection using Apollo Emulator (only for DoD EMSS Gateway), and RUDICS connectivity to the Iridium satellite network. The A3LA-RS does not support voice communications. The A3LA-RM can be controlled by a DTE capable of sending standard AT commands via a serial port.

- ❑ **IMPORTANT:** The A3LA-RS antenna must have a full view of the sky during transmission
- ❑ **DB25 Multi-Interface Connector:** The multi-interface connector is a male 15-pin miniature D-sub type that includes four interfaces – RS232, DC input power, ON/OFF control line, and TX\_ACTIVE.
- ❑ **Iridium TNC Antenna Connector:** The A3LA-RS modem uses a single SMA female 50-ohm connector to both transmit and receive message from the Iridium network.

SIM Reader under the Lid →



DB-25 Multi-Interface Connector



Iridium SMA Antenna Connector

## DEVICE DESCRIPTION (continued)

- ❑ **Antenna:** NAL Research recommends the SYN7391-C antenna.  
**CAUTION:** Do not connect or disconnect the antenna while device is powered.
- ❑ **SIM Card Interface:** The device uses and requires an Iridium SIM chip for operation, in support of Non-SBD features.
- ❑ **RS232 Data Interface:** This interface allows a connected DTE to utilize the A3LA-RS's modem functionality through standard AT and extended sets of AT commands.
- ❑ **DC Power Input:** Power is supplied through pin 1 (EXT\_B+) and pins 3 & 8 (EXT\_GND) on the DB-15 connector. Factory default: the A3LA-RS automatically **powers** on when external DC power is applied.



SYNC7391-C

## CONFIGURE DEVICE TO OPERATE

1. With the device turned off, remove the SIM cover located on top of the device.
2. Insert the SIM chip (facing down) into the SIM chip reader bracket, ensure SIM chip cut-off aligns with the SIM reader, and then lower and lock the SIM chip reader's bracket.
3. Connect the antenna connector to the Iridium connector port on the device.
4. Verify the antenna has a **clear** view of the sky and the cable loss between the modem and antenna is <3 dB.
5. Connect a DTE to the DB15 port on the device using the RS232/data cable model HRC-24-7R.
6. Supply DC power through pin 1 (EXT\_B+) and pins 3 & 8 (EXT\_GND).
7. Configure the A3LA-RS using AT commands (SatTerm).

