## **AIRBUS**

## **RANGER OUTDOOR UNIT (ODU)**



The ruggedized Ranger ODU is universally compatible with all Ranger terminal models. This simplifies sparing costs for various modem packages and allows for seamless equipment interchangeability across terminals.

Featuring an intuitive Pointing Assistant (PA), the Ranger ODU empowers even novice SATCOM users to quickly and easily align their antenna with the desired satellite. The PA guides users through satellite selection and elevation settings via a tablet and GUI software. It then directs the user to the correct azimuth until a "LOCKED" icon appears, at which point fine-tuning for optimal gain and securing the antenna can be completed.

The Ranger ODU offers flexible configuration options, including multiple embedded modem choices or a modem-agnostic setup. Additionally, it can be optionally equipped with an integrated Spectrum Analyzer card for spectrum monitoring.







The Ranger ODU features the Ranger Integrated Control System (RICS), eliminating the need for advanced SATCOM expertise or experience with spectrum analyzers.

| ODU OPTIONS                           |   |  |
|---------------------------------------|---|--|
| Modems                                |   |  |
| iDirect                               | 950mp Integrated Router Board / 450 SDR Modem       |  |
| Viasat                                | CBM-400 Modem Board                                 |  |
| Comtech EF Data                       | DMD1050TS or SLM-5650C L-Band Satellite Modem Board |  |
| Teledyne Paradise Datacom             | Q-Lite Satellite Modem Board                        |  |
| Newtec                                | MDM-3310 Modem Board                                |  |
| Color                                 | White, Desert Tan, Green, Gray                      |  |
| Spectrum Analyzer                     | 10Mhz and L-Band (Web Browser Based)                |  |
| TX Variable Gain Amplifier (Optional) | 0-30dB  |  |
| RX Variable Gain Amplifier            | 0-30dB  |  |
| Aux Output Power                      | +24VDC at 5A  |  |

| Technical Specifications         |  |                            |
|----------------------------------|--|----------------------------|
| Innut Douer                      | +24VDC (through inc  | cluded AC/DC power supply) |
| Input Power                      | AC/DC power supply accepts 100-240VAC 47-63Hz                                  |                            |
|                                  | 950mp: +24VDC at 1000mA  |                            |
| RX Port DC Availability          | CBM400: +13, +18, +20, +22VDC at 500mA   |                            |
|                                  | 1050TS: +24VDC at 1000mA   |                            |
|                                  | Q-Lite: +13, +15, +18, +20, +24VDC at 500mA                                    |                            |
|                                  | Modem Agnostic: +24VDC at 1000mA (+24VDC at 3A for BUC)                        |                            |
| 10MHz Output Availability        | 950mp: 10/50MHz 0dBm -3/+4dB on TX and RX                                      |                            |
|                                  | CBM400: -5 to +5dBm on TX and RX   |                            |
|                                  | 1050TS: 3dBm ± 3dB on TX and RX  |                            |
|                                  | Q-Lite: 2dBm ± 2dB on TX and RX  |                            |
|                                  | Modem Agnostic: 0dBm nominal on TX and RX                                      |                            |
| L-Band Frequency Range           | RX: 900-2150MHz TX: 950-2300MHz (varies with modem option)                     |                            |
|                                  | 950mp/1050TS/5650C/Q-Lite/Modem Agnostic: 17.25"L x 11.0"W x 5.0"H (w/bumpers) |                            |
| Dimensions                       | CBM400: 19.6"L x 11.00"W x 5.0"W (w/bumpers)                                   |                            |
| Environmental Specifications     |  |                            |
| Humidity                         | 0 to 100% (condensing) at 35°C   |                            |
| Rain                             | MIL-STD-810G   |                            |
| Salt Fog/Sand and Dust/Vibration | MIL-STD-810G   |                            |
| Altitude (Operational)           | 10,000 ft.   |                            |
| Altitude (Storage)               | 30,000 ft.   |                            |
| Temperature (Operational)        | -40°C to +50°C (w/o fan); -40°C to +55°C (w/ fan)                              |                            |
| Temperature (Storage)            | -40°C to +71°C   |                            |
| Pointing Assistant               |  |                            |
| User Interface                   | Web Browser via Ethernet (Tablet or PC)  |                            |
| GPS Receiver                     | Yes, antenna included  |                            |
| DVB-S2 Receiver                  | Yes  |                            |
| Elevation Accuracy               | ± 0.2°   |                            |
| Heading Accuracy                 | ± 1.5°, undisturbed field  |                            |
| iDirect Modem Integration        | Yes  |                            |
| DVB Lock Indicator               | Yes  |                            |
| iDirect Modem RX Lock Indicator  | Yes (950mp modem board required)   |                            |
| Beacon Lock                      | Yes (embedded spectrum analyzer required)                                      |                            |
| Connector Interfaces             |  |                            |
| Interface                        | Connector  | Mating Connector           |
| Power Input                      | PT02E12-4P   | PT06E12-4S-SR              |
| Receive/Monitor                  | N-Type (F)   | N-Type (M)                 |
| Transmit                         | N-Type (F)   | N-Type (M)                 |
| Ethernet                         | RJF2SA1B   | RJF6B                      |
| Console                          | RJF2SA1B   | RJF6B                      |
| GPS                              | TNC (F)  | TNC (M)                    |
| AUX Power Output                 | M53112E12-10S  | M53116F12-10P              |





**Airbus DS Government Solutions, Inc.** 2920 E. Plano Parkway, Suite 200

Plano, TX 75074 USA +1 (214) 231-3400

info@airbus-ds-gs.com | Airbus-DS-GS.com

