



Product Overview

The VP-120A-Lite system comprises of a 1.2m Ku- Band antenna, an RF chain that will support up to a 20W SSPA and a Newtec MENOS IP Satellite Interactive Terminal (IP-SIT) that has been incorporated into a small portable terminal.

Main Features

Antenna System

The VP-120A-Lite has been designed for quick and simple construction with no tools required. The antenna legs unfold and once put in to place, can be levelled using the adjustable foot screws and the site leveller incorporated into the base plate. Sand shoes are also available.

The motors for the azimuth and elevation drives are slotted in to place with locating lugs and then secured with safety pins. The antenna is made from light weight carbon and comes in two pieces which slot together using quick release catches. The feed arm can then be connected and secured with two aluminium stays that reduces any movement between the feed and the antenna.

The system incorporates an electronic compass, GPS receiver and inclinometer which are located on the feed arm. The sensors will feed information to the antenna controller so that accurate positioning of the dish can be achieved.

The antenna controller can be pre-programmed with the MENOS approved satellite (BADR4) so that a simple button press will auto-deploy the antenna and an indicator on the panel will confirm when the satellite has been found and communication with the HUB has been achieved. This makes deployment of the system possible without the need for a highly qualified engineer.

The Solid State Power Amplifier (SSPA) is conveniently located on the feed arm meaning that long lengths of fragile, flexible wave-guide are not required giving increased system reliability. Powers up to 20W are available using this configuration. On the receive side, a high stability LNB will feed an L-Band signal back to the suitcase where an IRD will be used for monitoring purposes.

The system will operate from 0°C to 50°C at 90% condensing humidity at altitudes up to 3,000m and will sustain wind speed up to 45 mph with ballast.

The system is currently going through MENOS certification.

VP-120A-Lite Cost Effective Antenna System



- System supports MENOS video & voice / data in a small suitcase
- Quick deploy assembly (under 5 minutes) with no tools required
- Full auto-pointing system (BADR4)
- Supports an SSPA up to 20W
- High gain two piece carbon reflector



Sematron have developed a new version of the MENOS IP Satellite Interactive Terminal (IP-SIT) for use in “Quick Deploy” applications. Based on a PC chassis with plug in cards, we have incorporated all of the elements of the IP-SIT into one small terminal under 23Kg.

As standard, the terminal will accept an IP input (voice, data or file transfer of video files) via an RJ45 Ethernet connector and it will translate this in to an L-Band signal via the on-board modulator. This modulated output will appear at an N-type connector on the side panel and via an RF cable, will feed the SSPA / antenna system. On the receive side, an L-Band signal from the LNB will enter the terminal via another N-Type connector and will feed an IRD where it will produce an on-screen confidence picture.

The terminal has a fold down, full size keyboard and mouse so that the MMX MENOS scheduler can be easily accessed. From here, a booking can be made and an indication of the link with the MENOS HUB is indicated with a confidence light.

The terminal has been built to military specifications to be able to handle high temperature and humidity levels along with reliable performance in dusty conditions.

Options:

- In addition to a voice & data input, SDI video (with embedded audio) or composite video (with balanced analogue audio) can be MPEG4 encoded, time-based corrected and IP encapsulated to feed live video over the IP network.
- Line-up colour bars, 1Khz tone & text can be output
- Spectrum analyzer, audio monitor & power meter
- Wi-Fi adaptor to allow journalists to web-surf and send emails/ scripts etc.