



S band 21 dB model



Digital TM/Video receiver option

NOMAD Antenna

IP connection :
Wireless 5 GHz
(802.11.a standard)
or
cable link

ACU
19" rackable
model with touch
screen and
joystick



**Your lightweight portable
Two axis solution
For your Data Link
&
Telemetry applications
available in:
L, S, C and X bands**

- **Compact portable antenna with fully integrated functions : RF auto-tracking, GPS tracking, Transmit & Receive**
- **Easy operating through a friendly Man Machine Interface running on standard computer under windows XP (Laptop, desktop, 19" rackable PC with touch screen and joystick).**
- **Pluggable flat panel antenna available in different frequencies such as L, S, C and X band.**
- **Double size panel antenna for higher gain (+ 2 dB) in option**
- **Tracking receiver (1 or 2 channels) integrated into the pedestal in option**
- **High speed rotation: 60°/s in option**

S band version technical specifications

<p>RADIOELECTRICAL</p> <p>Type : Array under protective radome with SCM RF tracking circuits</p> <p>Frequency bands : 2185 – 2475 MHz</p> <p>Gain : 19 dBi (or 21 dBi) @ 2.3 GHz</p> <p>Polarization : RHCP & LHCP or H/V</p> <p>3 dB beamwidth : 12x20°(or 12x9°) @ 2.3 GHz</p> <p>Side lobes : < 11 dB</p> <p>Power supply : 115/230 VAC or 24 VDC 0.4 KVA</p>	<p>OPERATING MODES</p> <p>Elevation and Azimuth axes are independent:</p> <ul style="list-style-type: none"> - STOP : stop on El. and Az. ; brakes are switched on - POSITION : El. and Az. axes reach the angular positions received through the PC (0 to 360° with 12 bits ; step = 0.08°) - SLEW : El. and Az. axes speed adjustment (-20 to +20°/s with 8 bits ; step = 0.16°/s) - AUTO-TRACKING: <i>Tracking on the RF signal</i> - RATE MEMORY: when auto tracking is lost, the antenna continues traveling of Az and El with extrapolated speed. - AUTOMATIC AT : the antenna automatically switches from Slave or Position mode to Auto-tracking mode - GPS SLAVE : The ACU elaborates El. and Az. angles through the target GPS information received under NMEA 0183 format. - PRESET : Up to 10 El. and Az. angles can be stored - SURVIVAL : El. 90°, brakes applied on El. and Az. - BACK-UP: the operator can select a back-up mode among: GPS, Memory track and slew. - AUTOTRACKING SUPPORTED BY GPS for absolute security in aircraft tracking. - PROGRAM TRACK (option): Tracking according to predicted trajectory calculated from a pre loaded boards of points (El, Az, Time) - SEARCH (option): El & Az pointing in a box type pattern for automatic target acquisition. - ACQUISITION: Antenna parameters such as: Operating mode, El/Az angles, Speed, acceleration, AGC levels, ... are recorded in real time (50 ms step) in a file for post flight test analysis.
<p>MECHANICAL</p> <p>Flat array dimensions : 630 x 410 (or 630 x 740)mm</p> <p>Weight : 32 Kg (or 37 Kg) with tripod</p> <p>Height : 1 047 mm (with tripod)</p>	
<p>PEDESTAL</p> <p>Type : Elevation over Azimuth</p> <p>Elevation range : - 5° to + 90°</p> <p>Azimuth range : No limited (RJ & Slip rings)</p> <p>Speed : 30°/s on both axis (60°/s in option)</p> <p>Acceleration : 100°/s² on both axis</p> <p>Pointing accuracy: +/- 0.08° (12 bits Opt. Enc)</p>	
<p>ENVIRONMENTAL</p> <p>Storage temperature : -35° to +70°C</p> <p>Operating temperature : -30° to + 50°C</p> <p>Rain : Up to 50 mm/hour</p> <p>Relative humidity : 0 to 100%</p> <p>Wind : 50 Km/h (with tripod) : 90 Km/h (fixed)</p>	

CONTACT INFORMATION



AA SYSTEL company

Address : 18, rue Nicolas Appert, 91898 Orsay Cedex, France

Phone : + 33 1 69 35 52 52 Fax: + 33 1 60 19 42 59

Contact : Mr. FOURREAUX Gérard Mobile: + 33 6 75 23 94 32 Email: gerard.fourreaux@group-aa.com

<http://www.aasystel.com> & <http://www.group-aa.com>