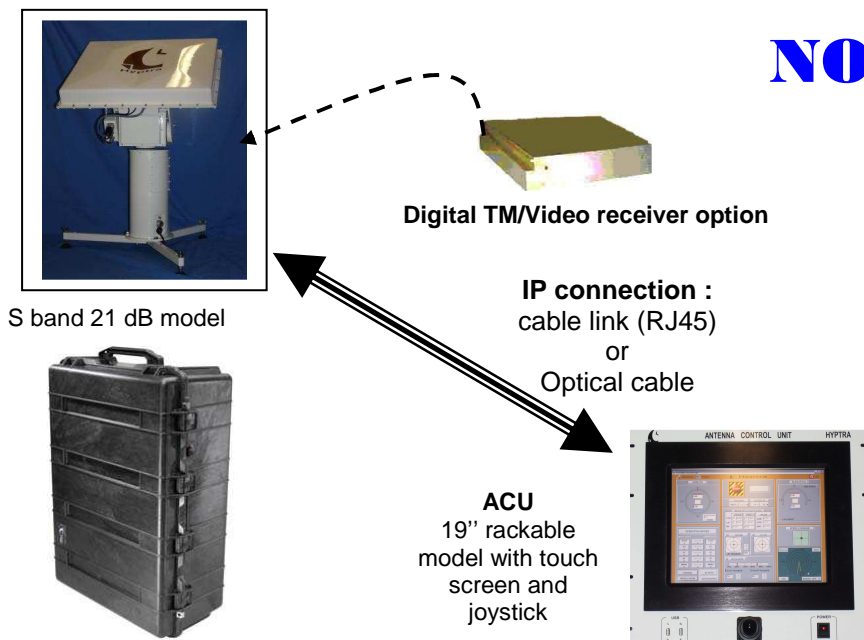




## NOMAD Antenna



Your lightweight portable  
Two axis (Ei over Az) and  
Two channels solution  
For your Data Link  
&  
Telemetry applications  
available in:  
L, S, C and X bands  
(Plug-in antenna panels)

- Compact portable antenna with fully integrated functions : RF auto-tracking, GPS tracking, Transmit & Receive or Transmit only with 2 Telemetry channels (RHCP & LHCP)
- 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
- Optical link interface for RF and/or M&C link between antenna and control room.
- **IP Video camera (Day/Infrared) in option**
- Rugged carry case

## S band version technical specifications (15 dB model)

<p><b>RADIOELECTRICAL</b></p> <p>Type : Array under protective radome with SCM RF tracking circuits</p> <p>Frequency bands : 1435 – 1535 MHz</p> <p>Gain : 15 dBi @ 1.5 GHz</p> <p>Polarization : RHCP &amp; LHCP or H/V</p> <p>3 dB beamwidth : 18x30° @ 1.5 GHz</p> <p>Side lobes : &lt; 11 dB</p> <p>Power supply : 115/230 VAC or 24 VDC 0.4 KVA</p>	<p><b>OPERATING MODES</b></p> <p>Elevation and Azimuth axes are independent:</p> <ul style="list-style-type: none"> <li>- <b>STOP</b> : stop on El. and Az. ; brakes are switched on</li> <li>- <b>POSITION</b> : El. and Az. axes reach the angular positions received through the PC (0 to 360° with 12 bits ; step = 0.08°)</li> <li>- <b>SLEW</b> : El. and Az. axes speed adjustment (-20 to +20°/s with 8 bits ; step = 0.16°/s)</li> <li>- <b>AUTO-TRACKING</b>: Tracking on the RF signal (with in option selection of the best channel through AM/AGC of the TM receiver)</li> <li>- <b>RATE MEMORY</b>: when auto tracking is lost, the antenna continues traveling of Az and El with extrapolated speed.</li> <li>- <b>AUTOMATIC AT</b> : the antenna automatically switches from Slave or Position mode to Auto-tracking mode</li> <li>- <b>GPS SLAVE</b>: The ACU elaborates El. and Az. angles through the target GPS information received under NMEA 0183 format.</li> <li>- <b>PRESET</b> : Up to 10 El. and Az. angles can be stored</li> <li>- <b>SURVIVAL</b> : El. 90°, brakes applied on El. and Az.</li> <li>- <b>BACK-UP</b>: the operator can select a back-up mode among: GPS, Memory track and slew.</li> <li>- <b>AUTOTRACKING SUPPORTED BY GPS</b> for absolute security in aircraft tracking.</li> <li>- <b>PROGRAM TRACK (option)</b>: Tracking according to predicted trajectory calculated from a pre loaded boards of points (El, Az, Time)</li> <li>- <b>SEARCH (option)</b>: El &amp; Az pointing in a box type pattern for automatic target acquisition.</li> <li>- <b>ACQUISITION</b>: 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.</li> </ul>
<p><b>MECHANICAL</b></p> <p>Flat array dimensions : 630 x 410 mm</p> <p>Weight : 32 Kg with tripod</p> <p>Height : 1047 mm (with tripod)</p>	
<p><b>PEDESTAL</b></p> <p>Type : Elevation over Azimuth</p> <p>Elevation range : - 5° to + 90°</p> <p>Azimuth range : No limited (RJ &amp; Slip rings)</p> <p>Speed : 30°/s on both axis (60°/s in option)</p> <p>Acceleration : 100°/s<sup>2</sup> on both axis</p> <p>Pointing accuracy: +/- 0.08° (12 bits Opt. Enc)</p>	
<p><b>ENVIRONMENTAL</b></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



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