

Dual Axis Naval Pedestal Data Sheet

CN: PPAE-360-110-AG



The PPAE-360-110-AG-MBT naval pedestal is designed to provide a high accuracy positioning, search, and tracking possibilities for different antennas and/or telemetric devices.

The Pedestal configuration is Elevation over Azimuth axes, both driving by Direct Drive Brushless Torque motors. Motors powered by Digital Servo amplifiers.

The pedestal is equipped with a Slip Rings assembly and customer's Rotary Joints.

Customized mechanical and electrical interfaces as well as Rotary joints and Slip Rings can be implemented.

Pedestal Specifications

Parameter	AZ axis	EL axis
Travel	Continuously Rotation	-25°÷85° Electrical
Nominal Speed	90deg/s (1.5rad/s)	90deg/s (1.5rad/s)
Minimal Speed	1mrad/s	1mrad/s
Max. Acceleration	180deg/s ² (3rad/s ²)	120deg/s ² (2rad/s ²)
Generated Torques	130Nm continuous, 190Nm peak	130Nm continuous, 190Nm peak
Natural Frequency	>100 Hz	> 100Hz
Mechanical Stops		Provided
Electrical Stops		Provided
Slip Rings*	Provided	
Rotary Joint**	Provided	Provided
Brake***	Provided	Provided
Brake hand release	Provided	Provided
Positioning Accuracy	±0.5mrad	±0.5mrad
Encoder Resolution	0.012mrad (2 ¹⁹ bit)	0.012mrad (2 ¹⁹ bit)
Payload* Balanced	EL axis + Antenna w Counterbalance	Antenna w Counterbalance
Operating temperature	-20°C to +55°C	
Wind Load	80Km/h	
Pedestal Weight	300Kg	
Payload Weight	100Kg	

* Customization possible

** Customer supply or definition

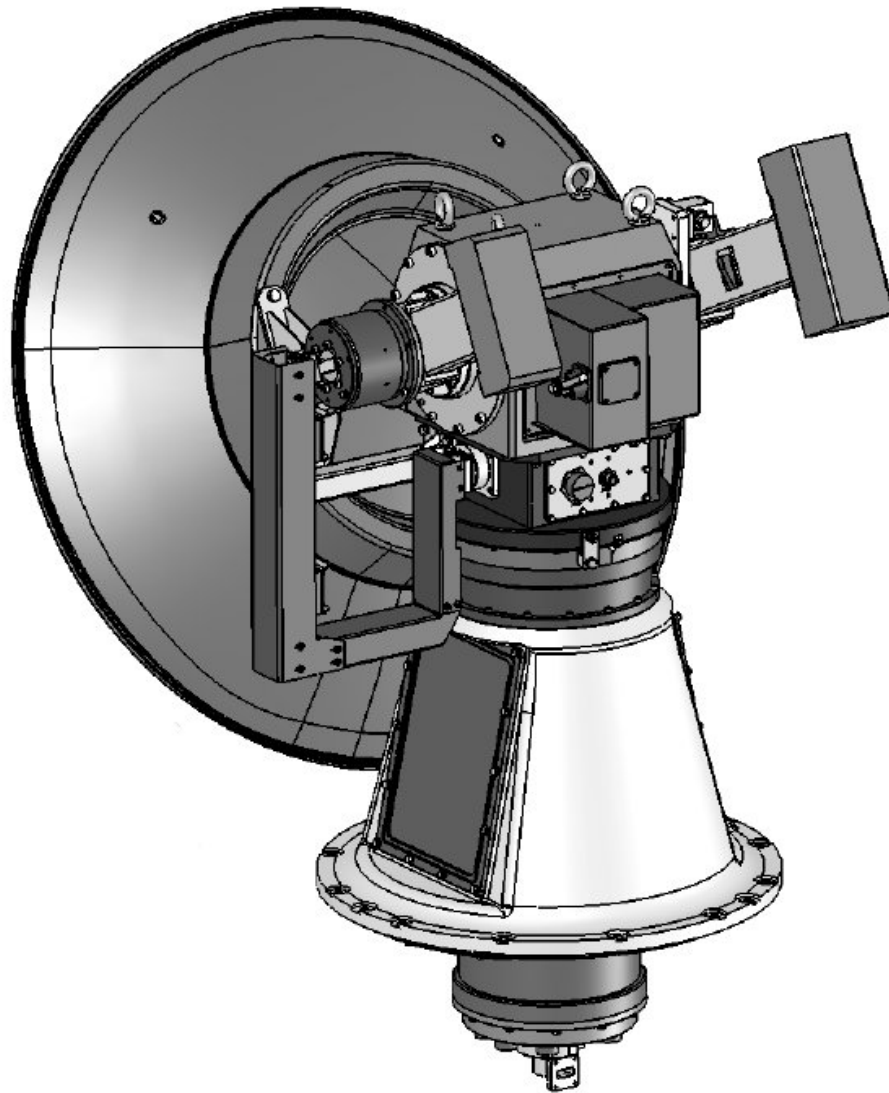
*** Option

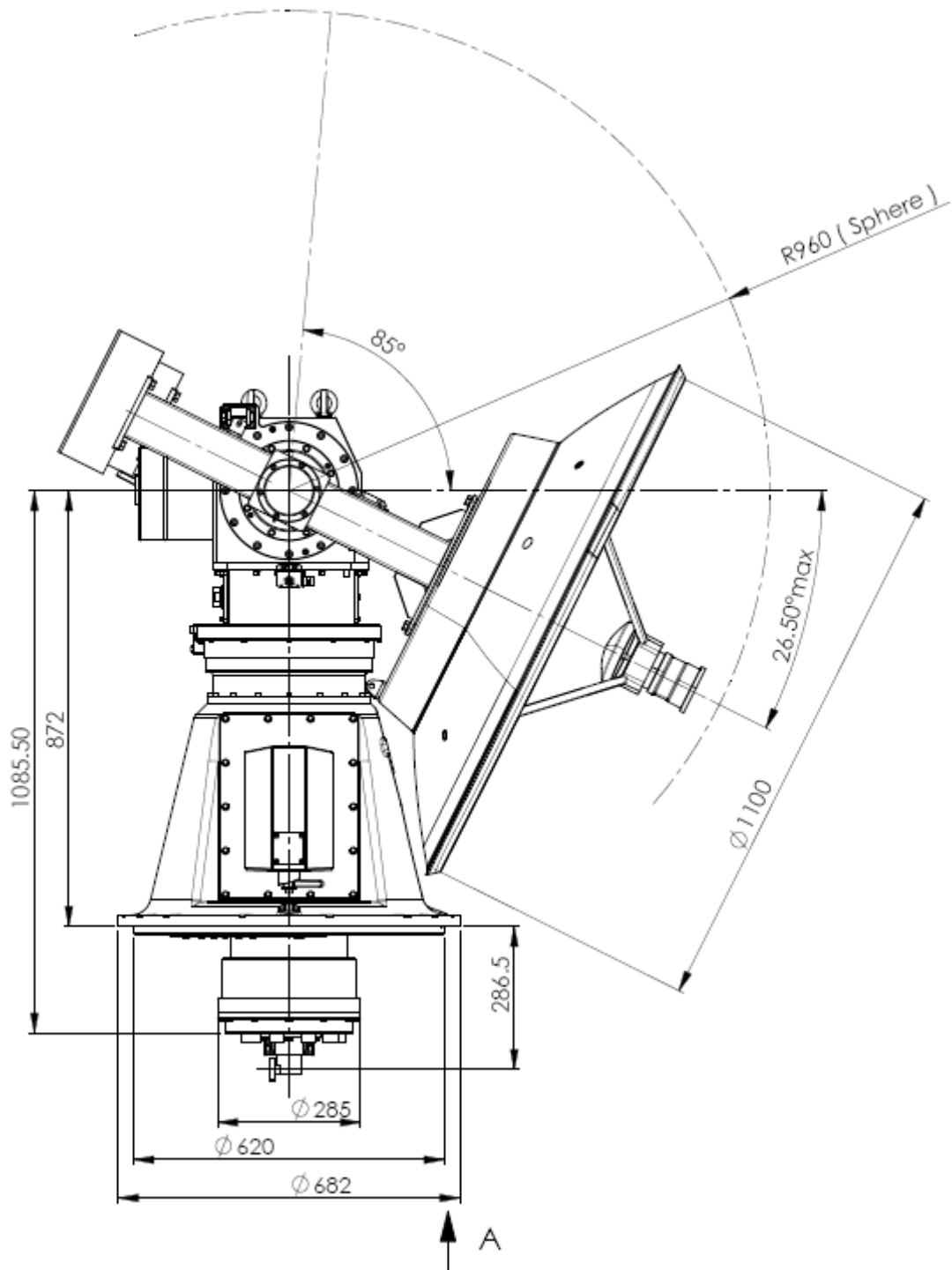
Environmental Conditions

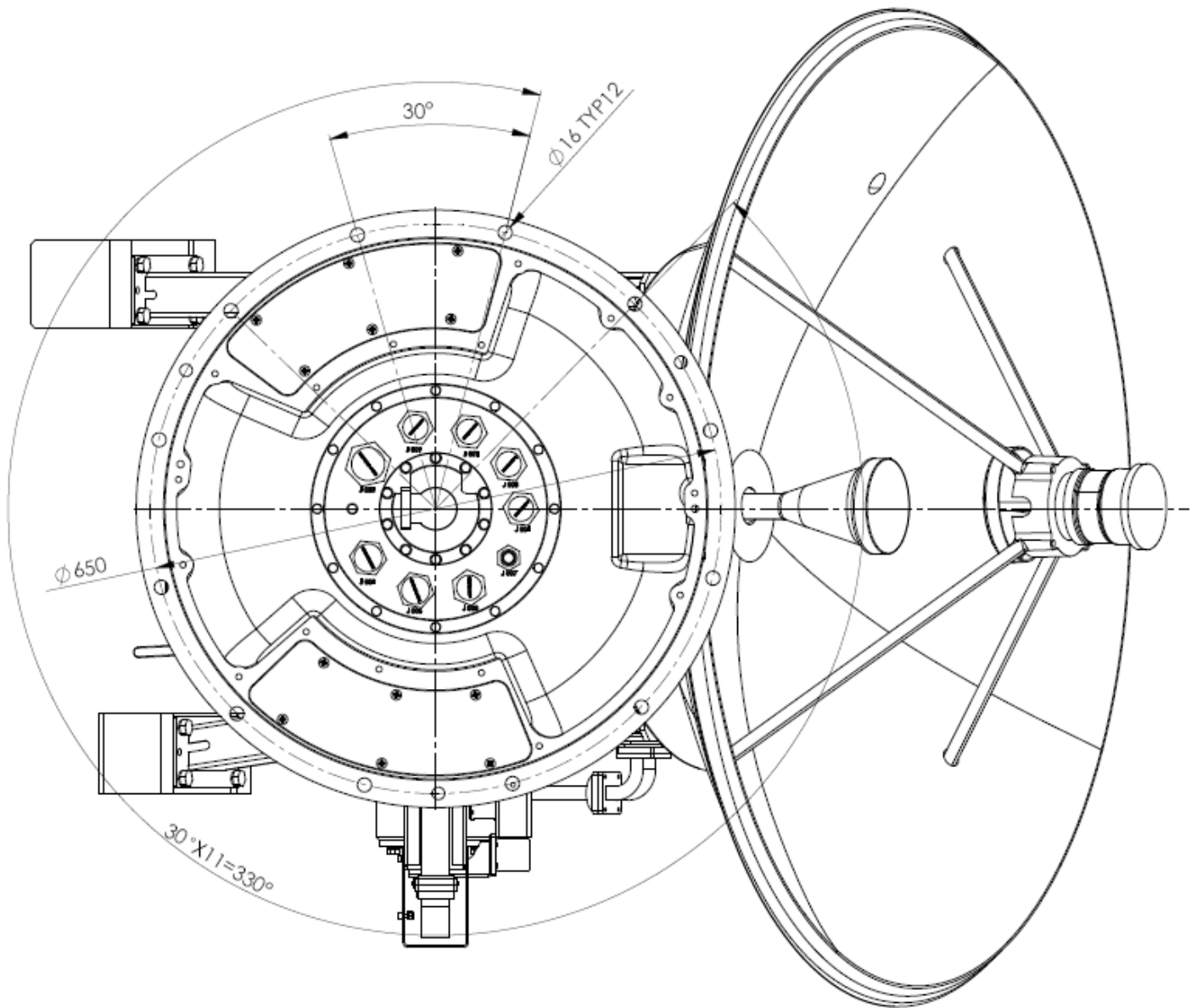
Ambient Temperature	Operation: -20°C to +55°C Storage: -30°C to +65°C MIL-STD-810F Method 501.4 & 502.4
Humidity	95% at temperature range between 35°C and 60°C MIL-STD-810F Method 507.4
Altitude	Operating up to 15,000 feet MIL-STD-810F Method 500.4
Corrosion (Salt Fog)	MIL-STD-810F Method 509.4
Vibration	MIL-STD-167-1, Type 1
Shock	30G, 11msec, half sine MIL-STD-810C Method 516.2 Procedure III

Dimensions & Mechanical Interface

Antenna, counterbalances, Rotary Joints including.







SCALE 1:5

VIEW A

Dimensions & Mechanical Interface

Pedestal only.

