TIGER PAN & TILT SYSTEM

TIGER

The TIGER is a stable and sophisticated pedestal adapted to immobile vantage points and extreme weather conditions.

TTIGER is a single heavy-duty unit, capable of supporting payloads up to 150kg without losing precision and designed to be a true REAL-TIME long range observation system.

CAPTURE
precise tracking in its best

TIGER PAN & TILT SYSTEM

The Tiger is a stable and sophisticated pedestal adapted to immobile vantage points and extreme weather conditions. TIGER is a single heavy-duty unit, capable of supporting payloads up to 150Kg without losing precision and designed to be a true REAL-TIME long range observation system.
Built-in control electronics and software provides a precise, smooth motion at all speeds, while an integrated slipring allows a continuous rotation of the pan axis.

TIGER PAN & TILT SYSTEM,
General Specification

Product Line: TIGER	
Type	U- Shape
Payload Type	Camera
Azimuth / Pan movement	Nx360˚ or up to 345˚ (no slip-ring)
Elevation / Tilt movement	Up to 360˚
Self-Weight [kg]	~110
Control mode	Speed / Position
Communication	Ethernet TCP / RS232 / RS422 / Rs485
Environmental protection	IP65, Humidity, Temperatures & more...
Power consumption [V] [A]	48V & 8Amp
max Payload (balanced) [kg]	150
Max Acceleration [˚/Sec²]	150
Speed (balanced) [˚/Sec]	0.01-360
Position Accuracy [˚]	±0.001
Position Sensor Encoder	Absolute / Incremental
Resolution [˚]	0.000005 / 0.0013
Stabilization systems	
Stabilization Accuracy [˚]	Payload dependent
Stabilization Sensor	IMU / FOG
Tracker systems	
GPS Stabilization by Datum point	Payload dependent
GPS Units	LLA / UTM

(*) Payload dependent

(**) mechanics & power dependent

(***) mass, balance & power dependent

- Control Interface, GPS and Stabilization – Optional

TIGER PAN & TILT SYSTEM, Environmental Specification

Storage Temperature [˚C]	-40 ~ +70		
Operational Temperature [˚C]	-40 ~ +55		
Humidity [˚C @ %RH]	+32 to +55 @ 95±4		
Salt Fog Exposure			
Salt Solution Concentration [%]	5±1		
Salt Fog PH	6.5 to 7.2		
Salt Fog Fallout Rate [ml/80cm2/hr]	1-3		
Duration [hr]	48		
Temperature [˚C]	+35±2		
Salt Fog Drying Period			
Temperature [˚C]	+25±10		
Duration [hr]	48		
Humidity [%RH]	<50		
Solar Radiation			
Temperature [˚C]	+32 to +49		
Max Intensity [W/m2]	1120		
Cycles	3		
Blowing Dust			
Wind Velocity [m/sec]	8.9		
Dust Concentration [g/m2]	10.6±7		
Relative Humidity [%]	<30		
Temperature [˚C] [*test 1 & test 2]	25		70
Blowing Rain			
Wind Velocity [m/sec]	18		
Rain Rate [mm/min]	>1.7		
Droplet Size Dia. [mm]	0.5 to 4.5		
Duration [min/face]	30		
No. of Faces	4		
Vibration			
Axes	3 (X,Y,Z)		
Vibration Level [grms]	X=2.4	Y=1.3	Z=3.6
Frequency Range [Hz]	5-500		
Vibration Time per Axis [min]	60		

Icing	
Ice Thickness [mm]	Ice Thickness [mm]
Temperature [˚C]	Temperature [˚C]
Blowing Sand	
Wind Velocity [m/sec]	18
Sand Concentration [g/m^3]	1.1±0.3
Humidity [%RH]	<30
Temperature [˚C]	+55±2
No. of Faces	1
Duration [min/face]	90
Mechanical Shock	
Axes	3 (±X, ±Y, ±Z)
Shock Form	Saw-Tooth
Shocks per Axis	6 (3 each direction)
Pulse Duration [mSec]	11
Total Shocks	18
Shock Amplitude [g]	40

TIGER PAN & TILT SYSTEM, Stabilized Version

Product Line: TIGER - Stabilized	
Stabilization Accuracy [˚]	±0.1 - ±1 (*payload & mechanics dependent)
Stabilization Sensor	**IMU:** - Gyro range: ±2,000˚/Sec - Accelerometer range: ±16g - Magnetometer range: ±2.5Gauss **FOG:** - Gyro range: ±490˚/Sec - Accelerometer range: ±10g

TIGER PAN & TILT SYSTEM, Tracker Version

Product Line: TIGER - Tracker	
GPS Stabilization Accuracy [˚]	±0.1 - ±1 (*mechanics and antenna spread dependent)
GPS Sensor	- Updates Rate: 5Hz - Receiver Type: GNSS - Static Accuracy (Heading): 0.3˚ RMS - Static Accuracy (Pitch / Roll): 0.5˚ RMS - Dynamic Accuracy (Heading): 0.3˚ RMS - Dynamic Accuracy (Pitch / Roll): 0.1˚ RMS

TIGER PAN & TILT SYSTEM, GUI Pannell

Parameter	Specification	Notes
Communication	Ethernet (TCP)	
Operation mode	Manual / Stabilized / Tracker	
Control mode	Speed / Position	
Operation	Manual arrows controlled by user	
Presets	Up to 15 saved points	
Targets	Up to 15 saved GPS targets	Tracker only
Register Status	Online state of system registers	
Software limit switches	User defined software limit switches for both axes	
Homing	Homing position declaration	
Scanning modes	Zigzag, Square and Snake	
IP Setting	Ability changing system IP addresses & port	

TIGER PAN & TILT SYSTEM, MICD

Title: TIGER
P.N: PTU1000
Rev A

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Levellers: optional
Sun Roof: optional
GPS: optional
(1400)
(1510)
CABLE
100
(43)
(1244.4)
Customer connectors
DETAIL A
Ø 28
Mounting holes
(Can be changed)
180
280
180
320
320