

PAN-TILT SYSTEMS

Suitable for a variety of uses and integrations adapted to customer needs.



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Ranging from the smallest most compact to heavy duty units, DC PT systems deliver high performance for payloads for different payloads. Gyro stabilization and target tracking modules are available and perform with high accuracy in the most demanding conditions. High power to weight ratio and compact size make them suitable for mobile solutions.

All units comply with IP67 standard and are suitable for land, air and sea applications. Mechanical assembly kit and software package can be fully customized to meet customer specifications.

Units also offer a unique integration of electro – optical sensors and radar with a single telescopic mast to avoid any dead zone in observation area.

DAT - CON pan-tilt units have been in daily use protecting Schengen border 24/7 for more than 10 years.

Custom configuration is available on all units.

BLADE



A unit with a very unique design and high performance characteristics. It has a built in static top, which can carry additional 50 kg of load. This design is used for a top mounted radar with a separate rotator. Two side wings are used for an electro-optical system, which can consist of various sensor options. Also integrated is a military grade IMU, when the unit is used in demanding environment and needs to be stabilized.

Load capacity / Torque	30 kg + 30 kg / 80 Nm
Static top load capacity	50 kg
Weight	46 kg (full configuration)
Dimensions (H x W x L)	412 x 735 x 302 mm
Materials	Aluminium
Protection / IP rating	IP 67
Operating temperature	-32°C to +55°C
Pan axis range / angle	n x 360°
Pan axis speed	0.001°/s - 100 °/s
Tilt axis range / angle	± 90°
Tilt axis speed	0.001°/s - 100 °/s
Accuracy	0.002°
Backlash	None
Stabilization	<0.3 mrad
Operating voltage	24 - 48 VDC
Maximum power	120 W
Communication to the unit	Eth 10/100 Base-T, RS-232, RS-485/422
Control protocol	DC-PT standard protocol
Standard compliance	MIL-STD-810G, MIL-HDBK-217-F, MIL-STD-461-F, MIL-STD-1275-D



For its small size and low weight it packs a lot of torque. This unit stands out not only performance wise, but it also has integrated an extensive set of features. Equipped with a cutting edge GPS/GNSS receiver it is able to give out units position with positioning error < 1.5 m. This feature combined with also integrated IMU give unit the ability to perform complex target tracking and target acquisition. All algorithms are a part of its standard FW package.

Load capacity / Torque	5 kg / 8 Nm
Weight	3,4 kg
Dimensions (H x W x L)	165 x 175 x 160 mm
Materials	Aluminium
Protection / IP rating	IP 67
Operating temperature	-32°C to +55°C
Pan axis range / angle	n x 360°
Pan axis speed	0.001°/s - 30 °/s
Tilt axis range / angle	od -90 do +30
Tilt axis speed	0.001°/s - 30 °/s
Accuracy	0.05°
Backlash	max 0.1 deg
Stabilization	<9 mrad
Brake	Self-locking
Operating voltage	24 - 48 VDC
Maximum power	25 W
Communication to the unit	Eth 10/100 Base-T, RS-232, RS-485/422(optional)
Control protocol	DC-PT protocol, PelcoD (optional)
Standard compliance	MIL-STD-810G, MIL-HDBK-217-F, MIL-STD-461-F, MIL-STD-1275-D



This is our biggest and most powerful unit. It is capable of hand-ling payloads up to 120 kg of weight in demanding conditions. It has a self-locking mechanism, so when power loss occurs it stays in position. Absolute encoder system enables the unit to be used without any initialisation procedures.

Load capacity / Torque	120 kg / 300 Nm
Weight	46 kg
Dimensions (H x W x L)	448 x 450 x 300 mm
Materials	Aluminium
Protection / IP rating	IP 66 compliant
Operating temperature	-32°C to +55°C
Pan axis range / angle	n x 360°
Pan axis speed	0°/s - 10 °/s
Tilt axis range / angle	± 45°
Tilt axis speed	0°/s - 10 °/s
Accuracy	0.1°
Backlash	None
Brake	Self-locking
Operating voltage	24 VDC
Maximum power	250 W
Communication to the unit	Eth 10/100 Base-T, RS-232, RS-485/422(optional)
Control protocol	DC-PT protocol, PelcoD (optional)
Standard compliance	MIL-STD-810G, MIL-HDBK-217-F, MIL-STD-461-F, MIL-STD-1275-D



This premium hi-end unit has it all. A perfectly finished machined aluminium body with a classic L shape design useful for various applications. Inside are two high performance drives powered by advance motion control board which results in a vast speed range from 0.001 deg/s up to 125 deg/sec. This covers ultra slow movements of the unit when observing a distant object as well as fast accelerations and movements needed for stabilisation and tracking applications.

Load capacity / Torque	50 kg / 80 Nm
Weight	40 kg
Dimensions (H x W x L)	552 x 754 x 172 mm
Materials	Aluminium
Protection / IP rating	IP 67
Operating temperature	-32°C to +55°C
Pan axis range / angle	n x 360°
Pan axis speed	0.001°/s - 100 °/s
Tilt axis range / angle	± 90°
Tilt axis speed	0.001°/s - 100 °/s
Accuracy	0.005°
Backlash	None
Stabilisation	<0.3 mrad
Operating voltage	24 - 48 VDC
Maximum power	120 W
Communication to the unit	Eth 10/100 Base-T, RS-232, RS-485/422(optional)
Control protocol	DC-PT protocol, PelcoD (optional)
Standard compliance	MIL-STD-810G, MIL-HDBK-217-F, MIL-STD-461-F, MIL-STD-1275-D



Simple and efficient is what describes our new pan-tilt unit Tracer. In fully marinated body lies a single powerful motion control diver. It is capable of handling payloads up to 40 kg in full range of motion. Its compact design and low weight make it perfect for integration where space is limited. Multiple slip-ring options make it compatible with most payloads from high frequency antenna applications to Giga-bit electro-optical head connections.

Load capacity / Torque	35 kg / 60 Nm
Weight	17 kg
Dimensions (H x W x L)	323 x 220 x 336 mm
Materials	Aluminium
Protection / IP rating	IP 67 compliant
Operating temperature	-32°C to +55°C
Pan axis range / angle	n x 360°
Pan axis speed	0.001°/s - 60 °/s
Tilt axis range / angle	± 90°
Tilt axis speed	0.001°/s - 60 °/s
Accuracy	0.02°
Backlash	None
Stabilisation	<9 mrad
Brake	Self-Locking
Operating voltage	24 - 48 VDC
Maximum power	160 W
Communication to the unit	Eth 10/100 Base-T, RS-232, RS-485/422(optional)
Control protocol	DC-PT protocol, PelcoD (optional)
Standard compliance	MIL-STD-810G, MIL-HDBK-217-F, MIL-STD-461-F, MIL-STD-1275-D





Load capacity / Torque	approx. 50 kg
Static top load capacity	100 kg
Weight	approx. 27 kg
Dimensions (H x W x L)	412 x 735 x 302 mm
Materials	Aluminium
Protection / IP rating	IP 67
Operating temperature	-32°C to +55°C
Pan axis range / angle	n x 360°
Pan axis speed	0.001°/s - 150 °/s
Tilt axis range / angle	± 20°
Tilt axis speed	0.001°/s - 10 °/s
Accuracy	0.05°
Backlash	None
Brake	Self-locking
Operating voltage	24 - 48 VDC
Maximum power	120 W
Communication to the unit	Eth 10/100 Base-T, RS-232, RS-485/422(optional)
Control protocol	DC-PT protocol (optional)
Standard compliance	MIL-STD-810G, MIL-HDBK-217-F, MIL-STD-461-F, MIL-STD-1275-D





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