SkyControl

PodView 2500 - Advanced Remote and Autonomous Sensor System

Persistently Detect, Classify and Track

PodView 2500 is the most agile, low latency, AI and edge processing enabled, Remote and Autonomous Sensor System in the market today. PodView 2500 autonomously and persistently detect, classify, alert users and track targets of interest; all at machine speed.

PodView 2500 combines high performance sensors, extreme agility, advanced stabilisation and outstanding low latency edge AI/ML processing in a single, compact solution.

The PodView 2500 Sensor

Visible Camera

Image Sensor	1/1.8-type STARVIS Sony CMOS Sensor (4.17M pixels)
Resolution	4MP @ 30 fps
Zoom	Zoom 30x Enhanced Optical Zoom
Lens	Lens f = 6.5 mm (wide) to 162.5 mm (tele),F1.6 ~ 4.8
Sensitivity or Low Light Performance	Colour: 0.009 lux (Shutter Speed: 1/30 s) B/W: 0.00008 lux (Shutter Speed: 1/30 s)
S/N Ratio	>50dB AGC off
Horizontal Field of View	59.0° - 2.8° dependent on zoom
Focus Mode	Auto/Manual
Exposure Mode	Auto/Manual/Spot
Wide Dynamic Range (WDR)	Yes

Motion Platform

Drives	HeliosTM Integrated Servo Drives powered by Servotorq IITM
Pan and Tilt Speed	0.05°/s to 720°/s (both axes)
Pan and Tilt Range	360° with continuous rotation
Stabilisation	Mechanical direct-drive and Electronic Image Stabilisation
Preset Positions	Repeatable accuracy better than 0.01°
Tours	User configurable tours
Positioning	Integrated GNSS

Video Streaming

Data Storage	2TB
Data Recording	Ability to record video from both cameras simultaneously for post-processing or retrieval
Video Encoding	H.264 (MP/HP) transported over RTSP, HLS & WebRTC

Edge Computing

AI/ML	Capable of running ML/AI Edge Models from AI partners or user installed
Operating System	AdvISE™ (JetPack 5)
Module	NVIDIA Jetson Xavier AGX
GPU	512-core NVIDIA Volta GPU with 64 Tensor Cores
AI Performance	32 TOPS
CPU	8-core NVIDIA Carmel Armv8.2 64-bit CPU 8MB L2 + 4MB L3
WebUI	WebUI

Networking

Interoperability	ONVIF Profile S, BSI-Flex-335 v1 & v2 (SAPIENT), COT (TAK)
Communication	Ethernet 1Gbps
Digital I/O	2 inputs and 4 outputs

Key Options

PodView 2500 - Advanced Remote and Autonomous Sensor System

Thermal Camera

Resolution	640 x 480 17µm
Thermal Spectral Band	Longwave Infrared (LWIR) 8 to 14 µm
Operation	Uncooled
Sensitivity	40mK
Horizontal Field of View	12°

PodView 2500 with 360° continuous rotation

Environmental and Certifications

Power Supply Voltage	46-50 Volts DC (12-55V with Optional PodHub)
Power Consumption	Typically, between 30 & 150W dependent on operating mode
Operating Noise	Silent
Enclosure	Aluminium with marine grade coating Toughened glass/germanium apertures
Connector	Single 22 pin MIL-DTL-38999 III (D38999) connector for power and communications
Colour	RAL6003 Olive Green - 30% Matt Alternative colour options available on request
Dimensions	365mm(H), 212mm(W), 183mm(D)
Weight	7.5Kg

Environmental and Certifications

Operating Temperature	-20°C to +55°C (option for -40°C to + 55°C)
Dust and Water	IP68 (BS EN 60529)
Impact	IK10 – EN62262
Vibration	EN60068-2-6
Shock	EN60068-2-27
Salt Spray	IEC60068-2-52:1996 severity Level 1
Wind	Stability at 150kmph, 42m/s
Certifications	CE Marked, EN61000-6-3, EN55032, FCC Part 15 BS EN 62368-1:2020+A11:2020 Audio / video, information & communication technologies

Optional Accessories

Cabling	Armoured cable, 1, 5 or 10 metre - other lengths available on request
PodHub	Enables input power from 12V to 55V and provides interfaces for a wide range of communications and other ancillaries' platforms
Rugged Controller	Hand Held Controller (HHC)
Mounts and Brackets	Multiple options for mounting on masts, crewed vehicles, UGV/USV/UAS, tripods and parapets
Mains PSU I	Mains Input: 90-305 V AC. Ouput: 48V DC, 350W

Alternative colour options available on request