



VEILUX[®]
The Art of Surveillance

V-ARMOR SERIES



VEX-THERMAL

Explosion Proof Integrated Camera



Key Features

- NTSC/PAL (field switchable)
- 2nd generation Digital Detail Enhancement™
- Image Optimization
- Invert/Rever (analog and 8-bit digital)
- Polarity Control (black hot/white hot)
- Color & Monochrome Palettes (LUTs)
- Digital Zoom: 2x, 4x, 8x
- Accurate temperature measurement for radiometry, analytics and telemetry
- Integrated wiper system

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Thermal Explosion Proof Integrated Camera



INTERFACING

Primary Electrical Connector	50-pin Hirose
Input Power (max 2.5 amp during shutter)	4.0 - 6.0 VDC
Power Dissipation, steady state	~1.2 W
Flat-Field Correction (FFC) Duration	<0.5 sec
Power Reduction Switch (disables analog video)	Yes
RS-232 Compatible Communication	57,600 & 921,600 baud
External Sync Input/Output	Yes
Discrete I/O Controls Available	Yes (10-camera minimum)
Settable Splash Screens	Yes (10-camera minimum)
User Configurability via SDK & GUI	Yes
Dynamic Range Switching	No

ELECTRICAL

Current	<2.5 A
Input Power	4.0 - 6.0 VDC
Communication	Pelco-D/Pelco-P/TCP/IP
Communication Rate	2400 ~ 19200bps

MECHANICAL

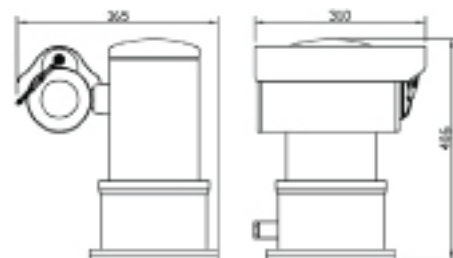
Material	Stainless steel 304
IP	IP67
Pan / Tilt	360° continuous pan rotation / -90° ~ +90°
Variable Speed	Rotation speed 10°/S (Max)
Weight	49 lb (22Kg)
Mounting	Base or Wall Mount

ENVIRONMENTAL

Air Pressure	80KPa ~ 106KPa
Temperature	-25°C ~ 65°C (-13 ~ 85°F)
Humidity	<95%RH [77°F (+25°C)]
Temperature Shock (5°/min)	Yes
Operational Altitude	Up to 40,000'
Vibration	4.3g three axis, 8 hr each
Operational	200g shock pulse w/ 11 msec sawtooth
Approvals	ROHS, REACH, WEEE

Specifications	VEX-T25	VEX-T50	VEX-T100
CERTIFICATE			
Ex-Marking	Exd II CT6 / DIP A20 TA, T6		
Certificate	CNEx 14.0068		
OVERVIEW			
Thermal Image	Uncooled VOx Microbolometer		
FPA/ Digital Video Display Formats	640 × 512		
Analog Video Display Formats	640 × 480 (NTSC); 640 × 512 (PAL)		
Pixel Pitch	17µm		
Spectral Band	7.5-13.5 µm		
Full Frame Rates	30 Hz (NTSC) / 25 Hz(PAL)		
Exportable Frame Rates	7.5 Hz (NTSC) , 8.3 Hz(PAL)		
Sensitivity (NEΔT)	<50 mK at f/1.0		
Scene Range (High Gain) / (Low Gain)	-40°C ~160°C / N/A		
Time to Image	~3.5 sec		
Factory Optimized Video	Yes		
FIELD OF VIEW			
Field of view	25 mm f/1.1	50 mm f/1.2	100 mm f/1.6
Field	25° x 20°@0.680 mr	12.4°x9.9°@0.340 mr	6.2°x5° @ 0.170 mr
Min Focus Distance	30cm	1.5m	7m
Hyperfocal Distance	21m	71m	160m
Length	25mm	50mm	100mm

Dimensions



Face view

Side view

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Short range thermal images

Image: Mailbox and man at center of image are 49m from camera



Long range thermal images

Image: Freeway off ramp is 827m from camera, directly above light pole at center of image (36m)

