

Medium and Long Range Hybrid Illuminators



Dedicated IP Lighting with PoE

Remote control from anywhere on the network. Easy set-up, commissioning, operation and maintenance, minimising labour time and costs whilst maximising performance 24/7.



Ultra-Powerful

VARIO2 hy16 is the most powerful single panel IP PoE illuminator on the market, delivering outstanding distances of up to 450m (1,476ft) of IR and 195m (640ft) of White-Light illumination



Platform Integration

VARIO2 IP provides a dedicated API for seamless integration into 3rd party technology platforms such as VMS, BMS and Access Control Systems.



VARIO Interchangeable Lens System

Angle of illumination from 10 - 120° can be easily, quickly and precisely adjusted by changing the VARIO holographic lens insert to match the specific camera field of view.



Advanced Security

VARIO2 IP illuminators offer greater levels of security, including stricter access controls and HTTPS. Health monitoring and lifetime diagnostics also provide insight into the illuminator's history and status.



Hot-Spot Reduction Technology (HRT)

The HRT system delivers a highly diffused, elliptical beam system to deliver more light where it's needed most. Also prevents overexposure of foreground subjects.

5 YEAR WARRANTY

All Raytec luminaires are provided with an industry leading 5 year warranty and have an expected useful life in excess of 10 years. See Warranty Statement for details.



Technical Specifications

Illuminator	hy4		hy6		hy8		hy16	
Wavelength	Infra-Red 850nm (940nm options available)	White Light	Infra-Red 850nm	White Light	Infra-Red 850nm (940nm options available)	White Light	Infra-Red 850nm (940nm options available)	White Light
Max Distance	130m (427 ft)	70m (230 ft)	180m (591ft)	88m (289ft)	290m (951ft)	144m (472ft)	450m (1,476ft) - DC supply 378m (1,240ft) - PoE supply	195m (640ft) - DC supply 164m (538ft) - PoE supply
Total Lumens	n/a	745lm per luminaire	n/a	1490lm per luminaire	n/a	2891lm per luminaire	n/a	5692lm per luminaire
Colour Temp	n/a	6000K~	n/a	6000K~	n/a	6000K~	n/a	6000K~
Colour Reproduction Index	n/a	>70	n/a	>70	n/a	>70	n/a	>70
Angle	Standard pack includes 10 circular + 35 x 10 (fitted as standard) and 60 x 25 elliptical lenses. Additional optional lenses: 80 x 30 and 120 x 50		Standard pack includes 10 circular + 35 x 10 (fitted as standard) and 60 x 25 elliptical lenses. Additional optional lenses: 80 x 30 and 120 x 50		Standard pack includes 10 circular + 35 x 10 (fitted as standard) and 60 x 25 elliptical lenses. Additional optional lenses: 80 x 30 and 120 x 50		Standard pack includes 10 circular + 35 x 10 (fitted as standard) and 60 x 25 elliptical lenses. Additional optional lenses: 80 x 30 and 120 x 50	
Input	PoE+ IEEE 802.3at or 24V DC		PoE+ IEEE 802.3at or 24V DC		60W PoE (4-pair PoE)* IEEE 802.3bt Class 6 [^] or 24V DC		90W Poe (4-pair PoE)* IEEE 802.3bt Class 8 or 24V DC	
Consumption	15W		22W		43W		77W - DC supply 71W - PoE supply	
HTTPS	Encryption algorithm: ECDSA (256 bit private keys)		Encryption algorithm: ECDSA (256 bit private keys)		Encryption algorithm: ECDSA (256 bit private keys)		Encryption algorithm: ECDSA (256 bit private keys)	
HTTPS Certificate	DiscoMan Version 2 required for certificate generation by DiscoMan		DiscoMan Version 2 required for certificate generation by DiscoMan		DiscoMan Version 2 required for certificate generation by DiscoMan		DiscoMan Version 2 required for certificate generation by DiscoMan	
Data Input	Cat 5 Cable		Cat 5 Cable		Cat 5 Cable		Cat 5 Cable	
Beam Shape	Elliptical with HRT (Hot-spot Reduction) Technology		Elliptical with HRT (Hot-spot Reduction) Technology		Elliptical with HRT (Hot-spot Reduction) Technology		Elliptical with HRT (Hot-spot Reduction) Technology	
Beam Angle System	VARIO Interchangeable Lens System		VARIO Interchangeable Lens System		VARIO Interchangeable Lens System		VARIO Interchangeable Lens System	
LED type	Platinum Elite SMT LEDs		Platinum Elite SMT LEDs		Platinum Elite SMT LEDs		Platinum Elite SMT LEDs	
Number of LEDs	6 x Infra-Red, 3 x White-Light		6 x Infra-Red, 6 x White-Light		12 x Infra-Red, 12 x White-Light		24 x Infra-Red, 24 x White-Light	
IP rating	IP66		IP66		IP66		IP66	
Temperature Range	-50° to +50°C (-58 to 122°F)		-50° to +50°C (-58 to 122°F)		-50° to +50°C (-58 to 122°F)		-50° to +50°C (-58 to 122°F)	
Colour	Black		Black		Black		Black	
Weight	950g (2.1lbs)		950g (2.1lbs)		1.65kg (3.6lbs)		3.16kg (7lbs)	
Dimensions	100 x 135 x 66mm (4" x 5" x 2.5" approx.)		100 x 135 x 66mm (4" x 5" x 2.5" approx.)		135 x 180 x 68.2mm (5" x 7" x 2.6" approx)		180 x 277 x 75mm (7" x 11" x 2.9" approx.)	
Cable Length	2 x 2.5m		2 x 2.5m		2 x 2.5m		2 x 2.5m	
Bracketry	VUB Bracketry also available (Optional)		VUB Bracketry also available (Optional)		VUB Bracketry also available (Optional)		VUB Bracketry also available (Optional)	
Minimum System Requirements	PC running Windows 10, modern web browser		PC running Windows 10, modern web browser		PC running Windows 10, modern web browser		PC running Windows 10, modern web browser	
Country of Manufacture	United Kingdom		United Kingdom		United Kingdom		United Kingdom	

[^] bt compatibility only available on illuminators with serial numbers ending in 120000 onwards.

* Single signature 24.9K and 12.5K detection resistance. Contact Raytec for further information

Technical Specifications

Integrated Command and Control Technology

Hardware Features	<ul style="list-style-type: none"> • In-built photocell for automatic on/off operation • Configurable external output • External telemetry input
Quick Access Software Features (provided as standard via integrated web interface)	<ul style="list-style-type: none"> • Individual or group control (Groups up to 16 units) • Individual control for Infra-Red and White-Light • Power On/Off • Power control: 20-100% • Deterrent feature with selectable patterns and speeds
Advanced User Defined Software Features: (provided as standard via integrated web interface)	<ul style="list-style-type: none"> • Timer functions • Soft start turn on • 3 x deterrent patterns • 3 x deterrent speeds • Selectable external telemetry input: volt – free or TTL • Individually trigger Infra-Red and White-Light • Photocell sensitivity trigger level • Assign illuminator to group for collective control • Assign name, group name and IP address • Restore factory defaults • Restart/reboot • Software upgrade • Supported protocols include HTTP, Local and VMS operating modes (including combinations) • Ping command functionality
System Integration (Application Programming Interface)	<ul style="list-style-type: none"> • API for integration into 3rd party platforms • API for integration into network devices via HTTP commands

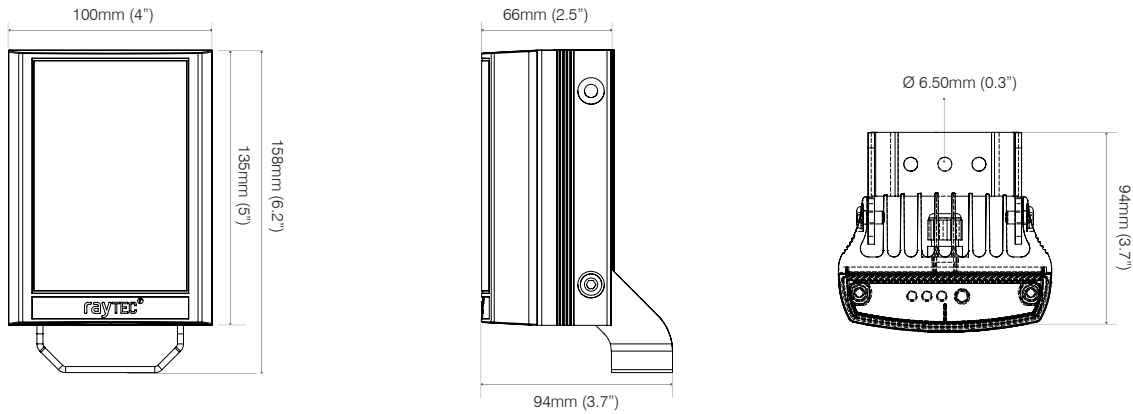
Security and Diagnostics	<ul style="list-style-type: none"> • Advanced security • HTTPS • Lifetime diagnostics • Advanced diagnostics with health monitoring • Administrator and user access levels • Password Protection: create user and administrator passwords
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POWERS – The Open Lighting Standard

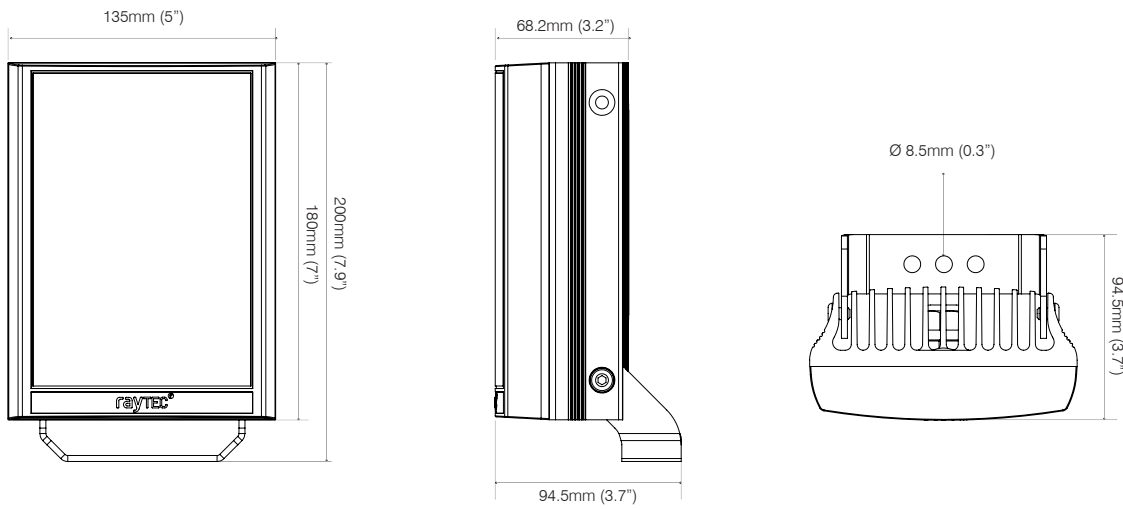
Specifications and distances based on the POWERS lighting standard. For full POWERS data and A&E specifications please contact sales@rayteclcd.com

Dimension Drawings

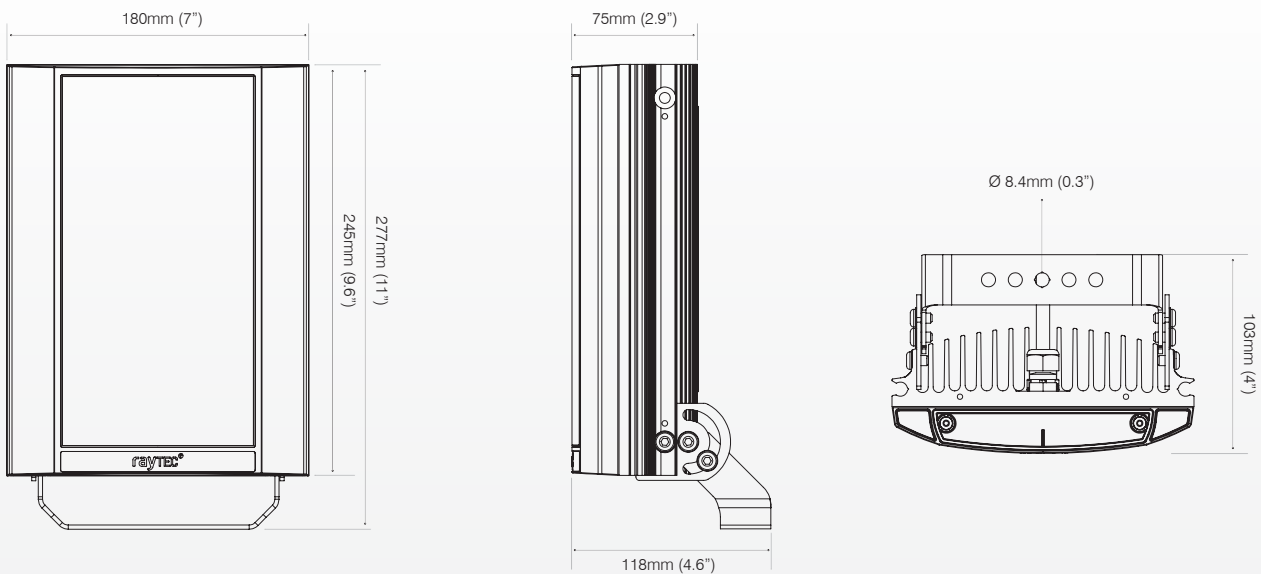
VARIO2 IPPoE hy4-1 and VARIO2 IPPoE hy6-1



VARIO2 IPPoE hy8-1



VARIO2 IPPoE hy16-1



Product Codes

Part Codes	Description	Angles	Infra-Red Distances	White-Light Distances
VAR2-IPPOE-hy16-1	VARIO2 iP PoE hy16 Network Illuminator, 3 angle options included, 24V DC or 90W 4 -pair PoE 802.3bt power input, black, 850nm and White-Light	10 x 10 °	450m (1,476ft) - DC supply 378m (1,240ft) - PoE supply	195m (640ft) - DC supply 164m (538ft) - PoE supply
		35 x 10°	225m (1,240ft) - DC supply 189m (620ft) - PoE supply	95m (312ft) - DC supply 80m (262ft) - PoE supply
		60 x 25°	122m (336ft) - DC supply 102m (400ft) - PoE supply	55m (180ft) - DC supply 46m (151ft) - PoE supply
		80 x 30° (optional)	95m (312ft) - DC supply 80m (262ft) - PoE supply	38m (125ft) - DC supply 32m (105ft) - PoE supply
		120 x 50° (optional)	59m (194ft) - DC supply 49m (163ft) - PoE supply	28m (92ft) - DC supply 23m (77ft) PoE supply
VAR2-IPPOE-hy16-1-c	VARIO2 iP PoE hy16 Network Illuminator, 3 angle options included, 24V DC or 90W 4 -pair PoE 802.3bt power input, black, 940nm and White-Light	Same as above	Contact Raytec	Contact Raytec
VAR2-IPPOE-hy8-1	VARIO2 iP PoE hy8 Network Illuminator, 3 angle options included, 24V DC or 60W 4-pair PoE IEEE 802.3bt power input, black, 850nm and White-Light	10 x 10 °	290m (951ft)	144m (472ft)
		35 x 10° (fitted as standard)	150m (492ft)	76m (249ft)
		60 x 25°	86m (282ft)	40m (131ft)
		80 x 30° (optional)	63m (207ft)	30m (98ft)
		120 x 50° (optional)	41m (135ft)	20m (66ft)
VAR2-IPPOE-hy8-1-c	VARIO2 iP PoE hy8 Network Illuminator, 3 angle options included, 24V DC or 60W 4-pair PoE IEEE 802.3bt power input, black, 940nm and White-Light	Same as above	Contact Raytec	Same as above
VAR2-IPPOE-hy6-1	VARIO2 iP PoE hy6 Network Illuminator, 3 angle options included, 24V DC or PoE+ IEEE 802.3at power input, black, 850nm and White-Light	10 x 10 °	180m (591ft)	88m (289ft)
		35 x 10° (fitted as standard)	108m (354ft)	52m (171ft)
		60 x 25°	63m (207ft)	28m (92ft)
		80 x 30° (optional)	45m (148ft)	20m (66ft)
		120 x 50° (optional)	27m (89ft)	14m (46ft)
VAR2-IPPOE-hy4-1	VARIO2 iP PoE hy4 Network Illuminator, 3 angle options included, 24V DC or PoE+ IEEE 802.3at power input, black, 850nm and White-Light	10 x 10 °	130m (427ft)	70m (230ft)
		35 x 10° (fitted as standard)	70m (230ft)	42m (138ft)
		60 x 25°	49m (161ft)	22m (72ft)
		80 x 30° (optional)	32m (105ft)	16m (52ft)
		120 x 50° (optional)	22m (72ft)	12m (39ft)
VAR2-IPPOE-hy4-1-c	VARIO2 iP PoE hy4 Network Illuminator, 3 angle options included, 24V DC or PoE+ IEEE 802.3at power input, black, 940nm and White-Light	Same as above	Contact Raytec	Same as above

Optional Parts

VAR-i16-LENS-8030	Individual i16 VARIO lens - 80°H x 30°V
VAR-i16-LENS-12050	Individual i16 VARIO lens - 120°H x 50°V
VAR-i8-LENS-8030	Individual i8 VARIO lens – 80°H x 30°V
VAR-i8-LENS-12050	Individual i8 VARIO lens – 120°H x 50°V
VAR-i6-LENS-8030	Individual i6 VARIO lens – 80°H x 30°V
VAR-i6-LENS-12050	Individual i6 VARIO lens – 120°H x 50°V
VAR-i4-LENS-8030	Individual i4 VARIO lens – 80°H x 30°V
VAR-i4-LENS-12050	Individual i4 VARIO lens – 120°H x 50°V

Contact Raytec for other beam angles