

## Medium and Long Range Infra-Red Illuminators



- Dedicated IP lighting for network cameras
- Smart and programmable lighting that responds to any event
- Control lights individually or in groups
- Integrated web interface
- Distances up to 350m (1148 ft)
- PLATINUM Elite SMT LED Technology
- Hot-spot Reduction Technology (HRT)
- VARIO interchangeable lens system
- Semi-Covert (850nm) or Covert (940nm)
- **NEW!** Advanced security and diagnostic features

VARIO2 IP illuminators provide dedicated high-performance lighting for IP cameras. They provide the ultimate solution for smart, situation-dependent lighting for video surveillance and can be fully integrated into an IP ecosystem. VARIO2 IP enables users to create dynamic lighting systems, capable of controlling illuminators individually or in groups, to automatically deliver the exact amount of light where and when it is needed, improving image quality under any condition.

Set up is quick and easy, with **RayLED's** DiscoMan software available as a free download. VARIO2 IP also reduces visits to site, minimising transport and labour costs and saving time, whilst ensuring maximum performance from your system at all times.

VARIO2 IP illuminators feature an interchangeable lens system with Hot-spot Reduction Technology to deliver highly even illumination, where it is most needed, for outstanding night-time images.

With several differently powered variants in the range, VARIO2 IP illuminators are suited to a wide range of applications and deliver maximum distances up to 350m (1148ft).

Features	Benefits
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.
Integrated Web Interface	Provides quick access screen for instant response to live events in real time as well as a host of advanced programmable settings.
Advanced User Defined Settings	Integrated web interface provides a host of user defined additional settings and diagnostics tools. Tailor your solution to meet the exact demands of your installation.
API for Platform Integration	VARIO2 IP provides a dedicated API for seamless integration into 3rd party technology platforms such as VMS, BMS and Access Control Systems.
HTTP Commands as Standard	HTTP command functionality provides even more integration possibilities. HTTP commands can be used to control VARIO2 IP illuminators from any network enabled device.
Platinum Elite SMT LED Technology	VARIO2 illuminators use cutting-edge PLATINUM Elite SMT LED technology together with an enhanced Cool Running™ thermal management system to deliver World leading power, reliability and flexibility.
VARIO Interchangeable Lens System	Angle of illumination can be easily, quickly and precisely adjusted by changing the VARIO holographic lens insert, to match the specific camera field of view.
Hot-spot Reduction Technology (HRT)	Hot-spot Reduction Technology (HRT) delivers a highly diffused, elliptical beam shape to deliver more light where it is needed, generating both longer distances and minimizing light wastage. The HRT system also prevents overexposure of foreground objects.
<b>NEW!</b> Advanced Security and Diagnostics	The latest VARIO2 IP illuminators offer greater levels of security, including stricter access controls and secondary HTTP port access. Health monitoring and lifetime diagnostics also provide greater insight into the illuminators history and current status.

## 5 YEAR WARRANTY

All RayLED luminaires are provided with an industry leading 5 year warranty and have an expected useful life in excess of 10 years



# Technical Specifications

Illuminator	i4	i6	i8
Max Distance	144m (472ft)	200m (656 ft)	350m (1148 ft)
Angle	Standard pack includes 10° circular + 35° x 10° (fitted as standard) and 60° x 25° elliptical lenses. Additional optional lenses: 80° x 30°, 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°, 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°, 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 <sup>^</sup> or 24V DC
Consumption	15W (25W for 940nm variants)	25W	51W
Data Input	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
Beam Angle 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
Number of LEDs	9 (12 for 940nm variants)	12	24
Wavelength	850nm (940nm options available)	850nm	850nm (940nm options available)
IP rating	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)
Colour	Black	Black	Black
Weight	950g (2.1lbs)	950g (2.1lbs)	1.65kg (3.6lbs)
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)
Cable Length	2 x 2.5m	2 x 2.5m	2 x 2.5m
Bracketry	U bracket included VUB Bracketry also available (Optional)	U bracket included VUB Bracketry also available (Optional)	U bracket included 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
Country of Manufacture	United Kingdom	United Kingdom	United Kingdom

\*Compatible with MicroSemi/ PowerDSine and Phihong PSE devices, excluding Cisco. Contact [RayLED](#) for further information. <sup>^</sup>bt compatibility only available on illuminators with serial numbers ending in 120000 onwards

# Technical Specifications

## Integrated Command and Control Technology

Hardware Features	<ul style="list-style-type: none"> <li>In-built photocell for automatic on/off operation</li> <li>Photocell following output</li> <li>External telemetry input</li> </ul>
Quick Access Software Features (provided as standard via integrated web interface)	<ul style="list-style-type: none"> <li>Individual or group control (Groups up to 16 units)</li> <li>Power On/Off</li> <li>Power control: 20-100%</li> <li>Boost: 120% power for 10 seconds</li> <li>Deterrent feature with selectable patterns and speeds</li> </ul>
Advanced User Defined Software Features: (provided as standard via integrated web interface)	<ul style="list-style-type: none"> <li>Timer functions</li> <li>Soft start turn on</li> <li>3 x deterrent patterns</li> <li>3 x deterrent speeds</li> <li>Selectable external telemetry input: volt – free or TTL</li> <li>Photocell sensitivity trigger level</li> <li>Assign illuminator to group for collective control</li> <li>Administrator and user access levels</li> <li>Password Protection: create user and administrator passwords</li> <li>Assign name, group name and IP address</li> <li>Restore factory defaults</li> <li>Restart/reboot</li> <li>Software upgrade</li> <li>Standard and advanced diagnostics</li> <li>Supported protocols include HTTP, Local and VMS operating modes (including combinations)</li> <li>Ping command functionality</li> </ul>

System Integration (Application Programming Interface)

- API for integration into 3rd party platforms
- API for integration into network devices via HTTP commands

## New Features

VARIO2 IP PoE Infra-Red

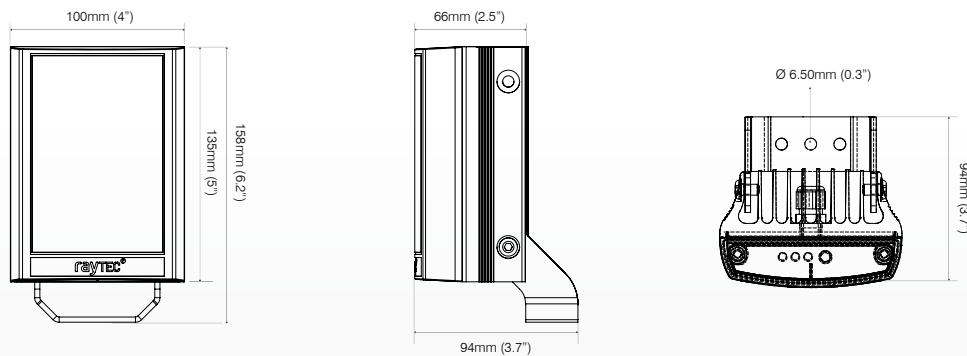
- Advanced security
- Secondary HTTP port access
- Lifetime diagnostics
- Advanced diagnostics with health monitoring
- 802.3bt PoE standard compatible for i8 units

New Features only available on Vario2 IPPoE with serial numbers from 1210000 onwards

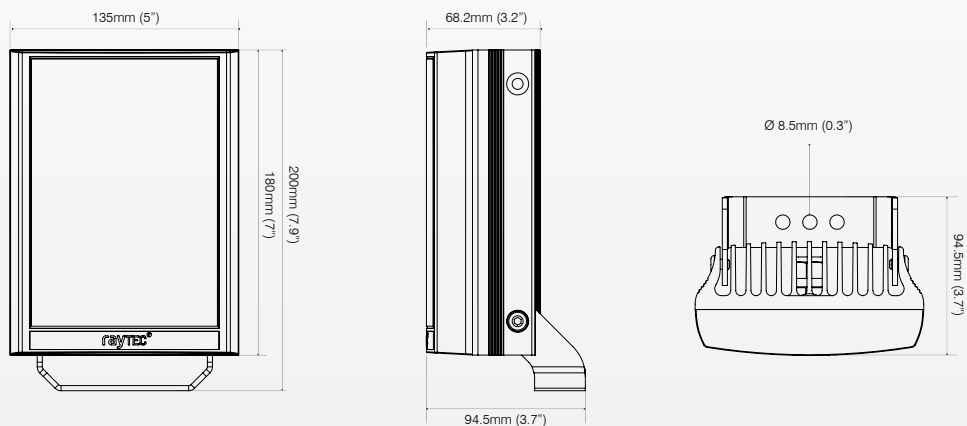
## POWERS – The Open Lighting Standard

Specifications and distances based on the POWERS lighting standard. For full POWERS data and A&E specifications please contact [sales@rayled.com](mailto:sales@rayled.com)

### VARIO2 IPPoE i4-1 and VARIO2 IPPoE i6-1



### VARIO2 IPPoE i8-1



## Product Codes

Part Codes	Description	Angles	Distances
VAR2-IPPOE-i8-1	VARIO2 IP PoE i8 Network Illuminator, 3 angle options included, 24V DC or PoE++ power input, black, 850nm	10 x 10°	350m (1148ft)
		35 x 10°(fitted as standard)	165m (541ft)
		60 x 25°	95m (311ft)
		80 x 30° (optional)	70m (230ft)
		120 x 50° (optional)	45m (148ft)
VAR2-IPPOE-i8-1-c	VARIO2 IP PoE i8 Network Illuminator, 3 angle options included, 24V DC or PoE++ power input, black, 940nm	10 x 10°	Contact RayLED
		35 x 10°(fitted as standard)	Contact RayLED
		60 x 25°	Contact RayLED
		80 x 30° (optional)	Contact RayLED
		120 x 50° (optional)	Contact RayLED
VAR2-IPPOE-i6-1	VARIO2 IP PoE i6 Network Illuminator, 3 angle options included, 24V DC or PoE+ power input, black, 850nm	10 x 10°	200m (656ft)
		35 x 10° (fitted as standard)	120m (394ft)
		60 x 25°	70m (230ft)
		80 x 30° (optional)	50m (164ft)
		120 x 50° (optional)	30m (98ft)
VAR2-IPPOE-i4-1	VARIO2 IP PoE i4 Network Illuminator, 3 angle options included, 24V DC or PoE+ power input, black, 850nm	10 x 10°	144m (472ft)
		35 x 10°(fitted as standard)	78m (256ft)
		60 x 25°	54m (177ft)
		80 x 30° (optional)	36m (118ft)
		120 x 50° (optional)	24m (79ft)
VAR2-IPPOE-i4-1-c	VARIO2 IP PoE i4 Network Illuminator, 3 angle options included, 24V DC or PoE+ power input, black, 940nm	10 x 10°	Contact RayLED
		35 x 10°(fitted as standard)	Contact RayLED
		60 x 25°	Contact RayLED
		80 x 30° (optional)	Contact RayLED
		120 x 50° (optional)	Contact RayLED

### Optional Parts

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 **RayLED** for other beam angles