VAR2-i4-1
Medium Range Infra-Red Illuminator











- Distances up to 144m (472ft)
- PLATINUM Elite SMT LED Technology
- Hot-spot Reduction Technology (HRT)
- VARIO Interchangeable Lens System
- VARIO Remote Control (optional)
- Angles from 10-120 degrees – from 1 product
- Semi-Covert (850nm) or Covert (940nm)
- Advanced Security Settings

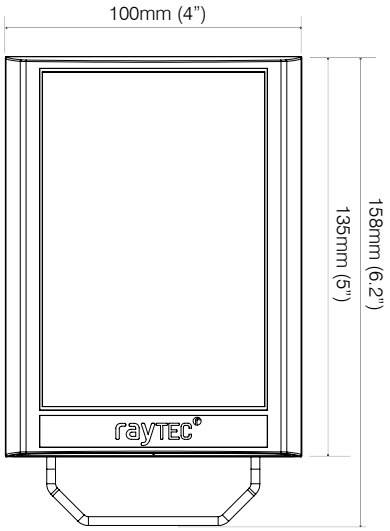
Delivering world leading power and illumination distances VARIO2 next generation illuminators can improve the performance of any video surveillance system at night.

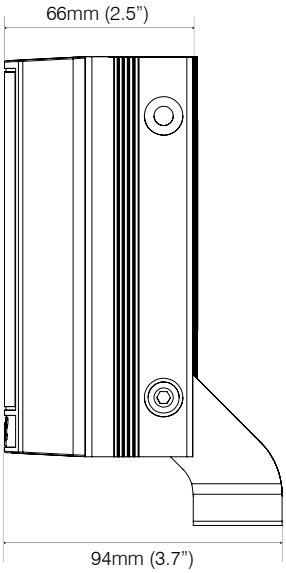
VARIO2 illuminators use PLATINUM Elite SMT LED technology to deliver more power and greater distances from a smaller platform than current generation illuminators. Providing a broader range of solutions, the VARIO2 series also offers a suite of advanced security features for easier programming and safer operation of smart lighting systems.

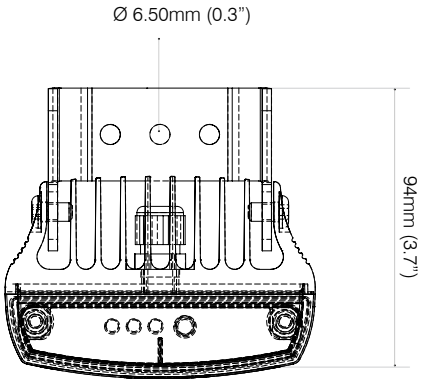
VARIO2 features an interchangeable lens system with Hot-spot Reduction Technology to deliver highly even illumination, where it is most needed, for outstanding night-time images. With the optional hand-held remote control, VARIO2 also makes installation and commissioning quicker, easier and safer.

The VARIO2 i4 Infra-Red series delivers maximum distances up to 144m (472ft).

Product Dimensions







Features	Benefits
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)	HRT - Hot-Spot Reduction Technology 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.
VARIO Remote Control (optional)	Allows set up quickly and safely from ground level and provides access to advanced set up features. Reduces both cost and time of installation and commissioning.
LED Status Indicator	Quick operational feedback on status and performance of the illuminator. Allows simple and quick commissioning of the installation and easy maintenance reviews
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.
Advanced Security Settings	Programming inputs on both the VARIO remote control and on the VARIO2 illuminator can be disabled if required. Additionally, the VARIO remote control can be given a PIN code to lock in settings and limit access.
Green Technology	In-built green features such as power adjust, telemetry control and timer function enhance the potential for energy savings.

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

5 YEAR WARRANTY

Technical Specifications

Illuminator

Max Distance	144m (472ft)
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°
Input	12/24V AC/DC
Consumption	13W max (25W for 940nm variants)
Beam Shape	Elliptical with HRT (Hot-spot Reduction Technology)
Beam Angle System	VARIO Interchangeable Lens System
LED type	Platinum Elite SMT LEDs
Number of LEDs	9 (12 for 940nm variants)
Wavelength	850nm (940nm options available)
IP rating	IP66
Temperature Range	-50° to +50°C (-58 to 122°F)
Colour	Black
Weight	950g (2.1lbs)
Dimensions	100 x 135 x 66mm (4" x 5" x 2.5" approx.)
Cable Length	2.5m
Bracketry	U bracket included VUB Bracketry also available (Optional)
Country of Manufacture	United Kingdom

Integrated Command and Control Technology

Integrated Standard Features	• Power adjust from 20-100% • In-built photocell for automatic on/off operation • Photocell following output • Photocell sensitivity adjust • LED status indicator provides status on performance of the unit • LED status indicator on/off • Disable programming mode
Advanced Features (accessed via VARIO remote control)	• Timer function (up to 30 mins) • Telemetry control • Remote Dimming • Restore factory default settings • Optional PIN to lock in settings and limit access • Remote Control can be disabled for improved security

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@raytecctv.com

Product Codes

Part Codes	Description	Angles	Distances
VAR2-i4-1	VARIO2 i4, 850nm, with 3 angle options included, 12-24V	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-i4-1-c	VARIO2 i4, 940nm, with 3 angle options included,12- 24V	10 x 10°	Contact Raytec
		35 x 10°(fitted as standard)	Contact Raytec
		60 x 25°	Contact Raytec
		80 x 30° (optional)	Contact Raytec
		120 x 50° (optional)	Contact Raytec

Optional Parts

VAR-rc	Remote Control for any VARIO Illuminator (only 1 remote needed)
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

VARIO PSU

VARIO Power Supply Units

The VARIO series of Power Supply Units (PSU) is purpose designed to correctly power all VARIO illuminators including VARIO IP, and provides a platform for the easiest, quickest and safest wiring and installation.

As a full product family, there is a PSU to power any VARIO illuminator. The VARIO PSU requires a 100-230V AC input and provides 24V output. 20W, 50W, 100W and 150W PSU options are available.

With multiple outputs, installers have the ability to power multiple VARIO illuminators from a single PSU (medium, large, and x-large size PSU only). The VARIO PSU also provides CAT5 connectivity for VARIO IP network illuminators (medium, large, and x-large size PSU only).

Each PSU features a 'Fast-Connect' wiring terminal for quick and easy wiring of all VARIO input and output connections, including telemetry input and photocell following output. White-Light LED status indicators are also provided on all fused outputs to indicate the correct voltage and to provide support illumination during wiring.

The VARIO PSU has a high quality IP66 aluminium enclosure making it suitable for all environmental conditions. It also features convenient automotive blade output fuses allowing for fast and easy sourcing and replacement if required. The Slowblow input fuse can also be easily replaced without disconnecting the mains input, for easier and safer installation and maintenance. The VARIO PSU series is suitable for all VARIO low voltage lighting installations.

Features

Powerful

- Powers all VARIO illuminators including VARIO IP
- Powers multiple VARIO illuminators from one PSU

Flexible

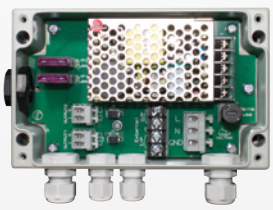
- CAT5 connection for VARIO IP (medium, large, and x-large only)
- 'Fast-Connect' easy wiring for all VARIO input and output connections
- Internal illumination for night time installation

Reliable

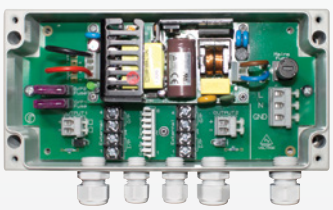
- High Quality IP66 Aluminium Enclosure
- Automotive blade output fuses - fast and easy sourcing and replacement

Controlled

- Provides correct power for all VARIO illuminators
- Slowblow input fuse - replaceable without disconnecting mains input
- Status indicators signify correct voltage



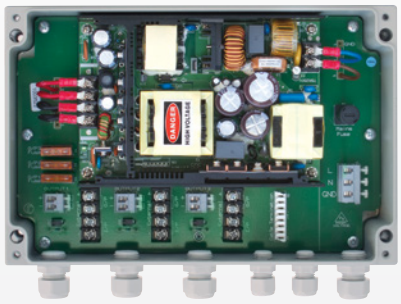
PSU-VAR-20W-1 (small)



PSU-VAR-50W-2 (medium)



PSU-VAR-100W-2 (large)



PSU-VAR-150W-3 (x-large)

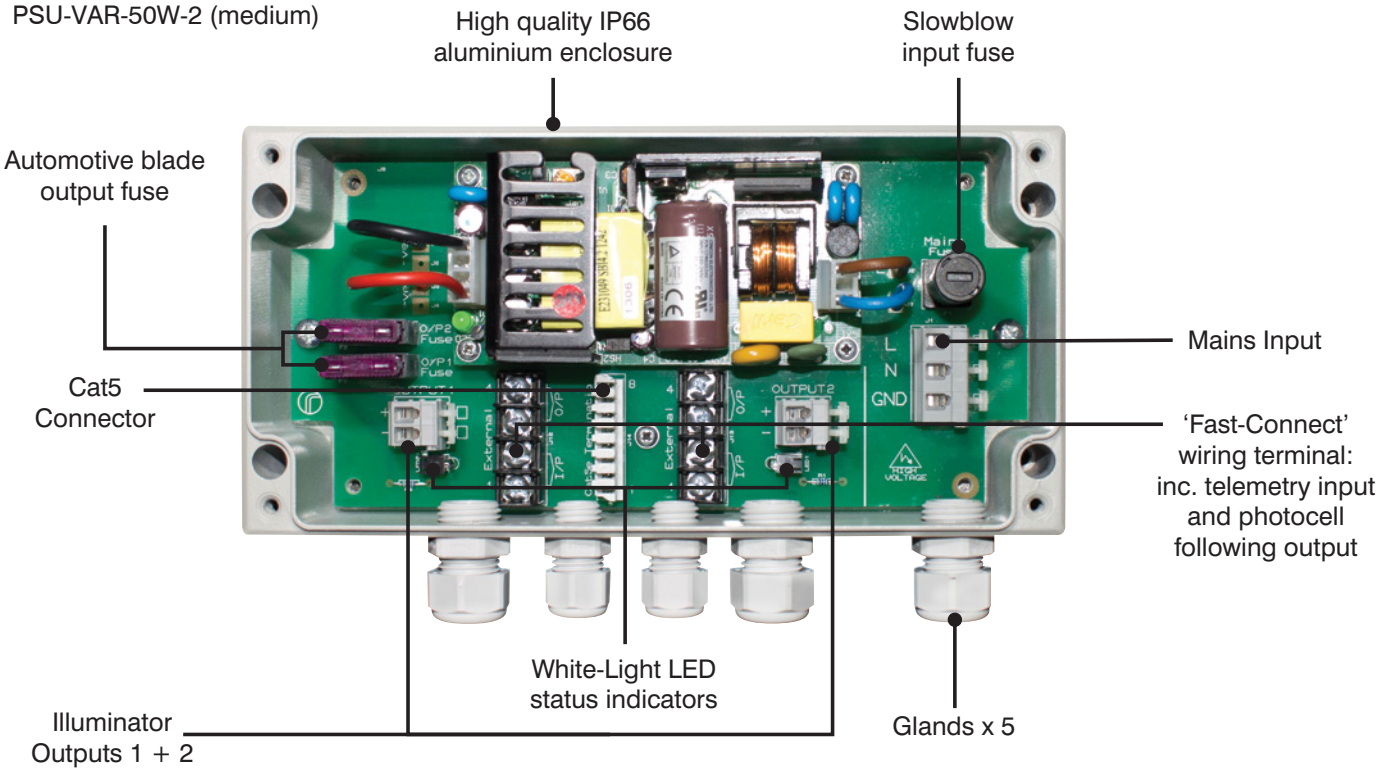
Raytec Global (excluding Americas)
Tel: +44 (0) 01670 520055
sales@raytecctv.com
www.raytecctv.com

Raytec Americas:
Tel: +1 613 270 9990
Toll Free: +1 888 505 8335
ussales@raytecctv.com

Version 2

VARIO PSU Diagram

Model shown:
PSU-VAR-50W-2 (medium)



Features	Benefits
Purpose designed PSU for VARIO illuminators	Provides correct power and provides easy wiring and installation
A full family of VARIO PSU's	Can power any VARIO illuminator
Multiple outputs (available on medium, large, and x-large model)	Ability to run multiple VARIO units from a single PSU
Cat 5 connector (available on medium, large, and x-large model)	Easy CAT5 connection for VARIO IP illuminators
'Fast-Connect' Wiring	Robust terminal for fast and easy wiring of all input/output connections
White-Light LED status indicators	To identify correct output voltage and provide support illumination during installation and maintenance
High quality IP66 aluminium enclosure	Suitable for all environmental conditions
Automotive blade output fuses	Fast, easy sourcing and replacement
Slowblow input fuse	Can be replaced without disconnecting mains for easier and safer installation and maintenances.

Raytec Global (excluding Americas)
Tel: +44 (0) 01670 520055
sales@raytecccctv.com
www.**raytec**cctv.com

Raytec Americas:
Tel: +1 613 270 9990
Toll Free: +1 888 505 8335
ussales@raytecccctv.com

Technical Specifications

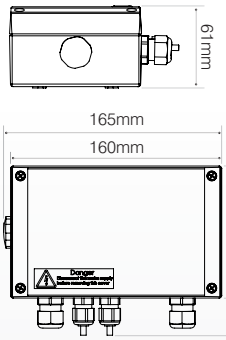
	PSU-VAR-20W-1	PSU-VAR-50W-2	PSU-VAR-100W-2	PSU-VAR-150W-3
Illuminators (standard)	1x VARIO 2 series plus aux output (max 8W)	2 x VARIO 4 series	2 x VARIO 8 series or 1x VARIO 16 series	3 x VARIO 8 series
Other Illuminator options		4 x VARIO 2 series*	4 x VARIO 4 series* 8 x VARIO 2 series*	1 x VARIO 16 series* 6 x VARIO 4 series*

*Please note: for medium, large and x-large PSUs powering an increased number of VARIO illuminators, the total power of the illuminators must be equivalent to the PSU max output - illuminator output cables may also need to be commoned together to suit the number of available glands.

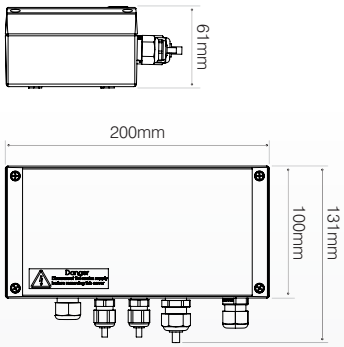
Mixed model sizes of VARIO illuminators can be powered from the same PSU
e.g. PSU-VAR-50W-2 can also run 2 x VARIO 2 series and 1 x VARIO 4 series

Input	100-230V AC			
Input Fuse Type	20mm, slowblow, user replaceable without disconnecting mains input			
Input Fuse Rating	1A	2.5A	2.5A	2.5A
Max Output	20W	50W	100W	150W
Output for VARIO Illuminators	1 for VARIO 2 series	2 for VARIO 4 series or equivalent power units	2 for VARIO 8 series or equivalent power units	3x VARIO 8 series or equivalent power units
Output Fuse Type	automotive, blade, user replaceable			
Output Fuse Rating	3A	3A	5A	5A
FastConnect™ wiring	Quick and easy wiring for VARIO input and output connections - 4 way robust terminal for telemetry input and photocell following output			
White Light status LEDs	White-Light LED status indicators on all fused outputs to indicate correct voltage and to provide support illumination during installation and maintenance			
Cat5 Connector	N/A	Cat5 Connector for VARIO IP	Cat 5 Connector for VARIO IP	Cat 5 Connector for VARIO IP
Glands	2x M16, 2x M12, IP68	3x M16, 2x M12, IP68	3x M16, 2x M12, IP68	4x M16, 2x M12, IP68
Enclosure construction	High quality, power coated, IP66 aluminium			
Dimensions	160 x 129 x 61 mm	200 x 131 x 61 mm	160 x 191 x 81 mm	240 x 191 x 81 mm
Weight	0.9kg	1.0kg	1.7kg	2.4kg
IP Rating	IP66			
Certification	CE compliant			
Accessories available	External mounting feet			

PSU-VAR-20W-1(small)

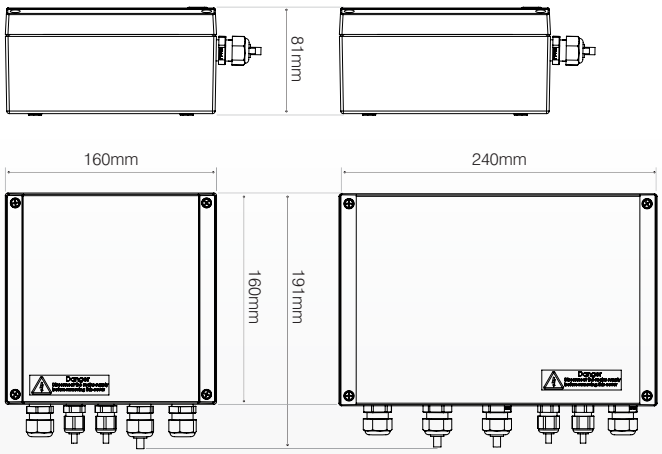


PSU-VAR-50W-2 (medium)



PSU-VAR-100W-2 (large)

PSU-VAR-150W-3 (x-large)



Part Codes

PSU-VAR-20W-1	VARIO PSU - 24V, 20W, 1xO/P for 1x2 series VARIO illuminator
PSU-VAR-50W-2	VARIO PSU - 24V, 50W, 2xO/P for 2x4 series VARIO illuminators
PSU-VAR-100W-2	VARIO PSU - 24V, 100W, 2xO/P for 2x8 series VARIO illuminators
PSU-VAR-150W-3	VARIO PSU - 24V, 150W, 3xO/P for 3x8 series VARIO illuminators

3 YEAR WARRANTY

All Raytec power supply units are provided with a 3 year warranty. Raytec power supply units are IP66 rated, robust and highly durable for long life and operation in all environmental conditions.

3 YEAR WARRANTY

Raytec Global (excluding Americas)
Tel: +44 (0) 01670 520055
sales@raytecccctv.com
www.**raytec**cctv.com

Raytec Americas:
Tel: +1 613 270 9990
Toll Free: +1 888 505 8335
ussales@raytecccctv.com

raytec