VARIO2
Single and Multi Panel Infra-Red Illuminators











VARIO Interchangeable Lens System

Angle of illumination from 10 - 180˚ can be easily, quickly and precisely adjusted by changing the VARIO holographic lens insert to match the specific camera field of view.

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.

Hot-spot Reduction Technology (HRT)

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

Multiple Variants

VARIO2 illuminators are available in a range of different sizes to suit different applications and requirements.

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.

5 YEAR WARRANTY

Raytec Global (excluding Americas): +44 (0)1670 520055 • sales@raytecled.com
Raytec Americas: +1 613 270 9990 • ushazsales@raytecled.com

Technical Specifications - Single Panel Illuminators

Illuminator	i2	i4	i6	i8	i16
Light Type	Infra-Red				
Max Distance	78m (256ft)	144m (472ft)	200m (656ft)	350m (1,148ft)	500m (1640ft)
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	12/24V AC/DC	12/24V AC/DC	12/24V AC/DC	24V AC/DC
Consumption	10W	13W max (25W for 940nm variants)	25W max	46W	100W
Standby Power Draw	Standby Power Draw (Status LEDs on) - 0.4W				
Standby Power Draw	Standby Power Draw (Status LEDs off) - 0.2W				
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	6	9 (12 for 940nm variants)	12	24	48
Wavelength	850nm, 940nm (covert), and 730nm options available	850nm, 940nm (covert), and 730nm options available	850nm	850nm, 940nm (covert), and 730nm options available	850nm, 940nm (covert), and 730nm options available
IP rating	IP66				
Temperature Range	-50° to +50°C (-58°to +122°F)				
Colour	Black (white optional)				
Weight	600g (1.3lbs)	950g (2.1lbs)	950g (2.1lbs)	1.65kg (3.6lbs)	3.1kg (6.8lbs)
Dimensions	75 x 120 x 93mm (3" x 4.7" x 3.7" approx)	100 x 158 x 94mm (4" x 6.2" x 3.7" approx)	100 x 158 x 94mm (4" x 6.2" x 3.7") approx	135 x 200 x 94.5mm (5" x 7.9" x3.7" approx)	180 x 277 x 103mm (7" x 11" x 4.1" approx)
Cable Length	2.5m (8.2ft)				
Bracketry	U bracket included (VUB bracketry also available)				
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 • LED status indicator provides status on performance of the unit • Telemetry control • Restore factory default settings
Advanced Features (accessed via VARIO remote control)	• Timer function (up to 30 mins) • Remote dimming • Optional PIN to lock in settings and limit access • Remote Control can be disabled for improved security • Photocell sensitivity adjust • LED status indicator on/off • Disable programming mode

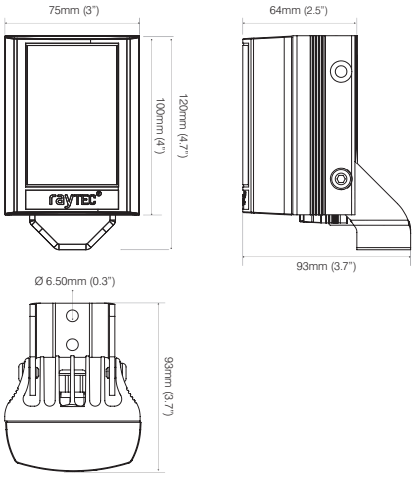
POWERS – The Open Lighting Standard

Specifications and distances based on the POWERS lighting standard.

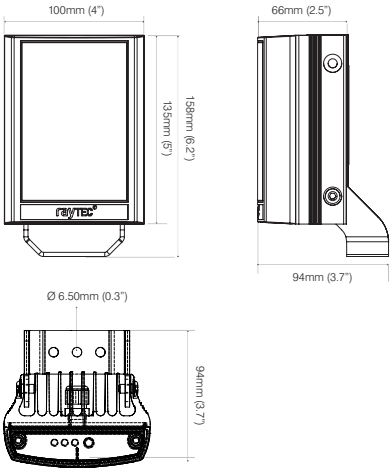
For full POWERS data and A&E specifications please contact sales@raytecled.com

Product Dimensions - Single Panel Illuminators

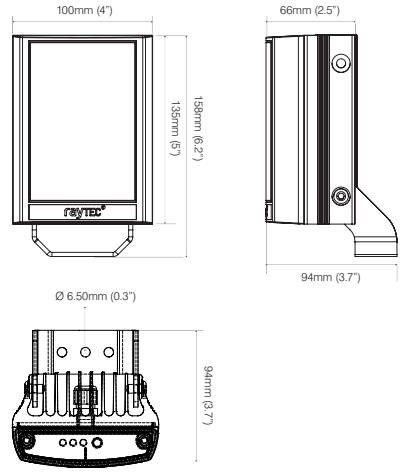
i2



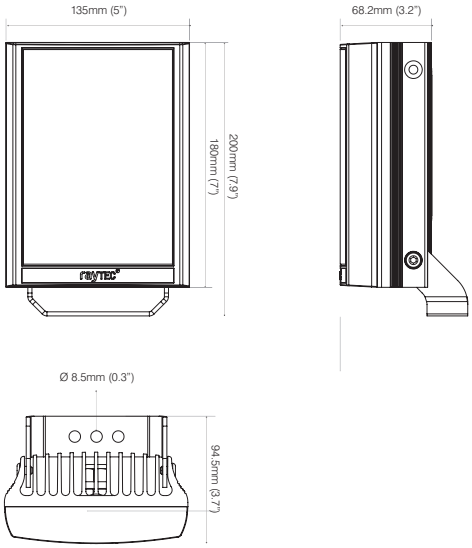
i4



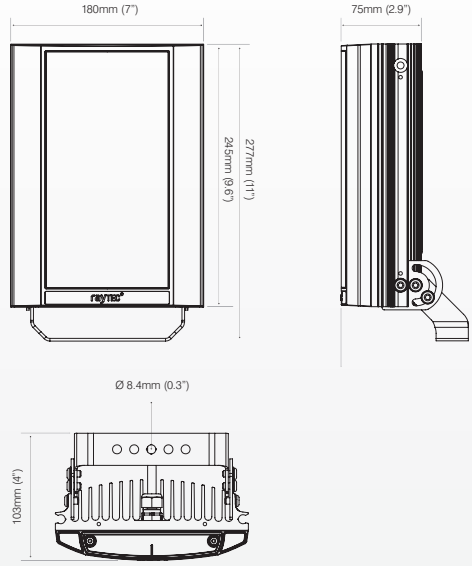
i6



i8



i16



Product Codes - Single Panel Illuminators

Part Codes	Description	Angles	Distances
VAR2-i2-1	VARIO2 i2-1 - 3 angle options included 10 ° x 10 °, 35° x 10 ° and 60 ° x 25°, 12-24V AC/DC, black, 850nm	10 x 10°	78m (256ft)
		35 x 10° (Fitted as standard)	54m (177ft)
		60 x 25°	36m (118ft)
		80 x 30° (optional)	24m (79ft)
		120 x 50° (optional)	18m (59ft)
VAR2-i2-1-c	VARIO2 i2-1-c - 3 angle options included 10 ° x 10 °, 35° x 10 ° and 60 ° x 25°, 12-24V AC/DC, black, 940nm (covert)	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
VAR2-i4-1	VARIO2 i4-1 - 3 angle options included 10° x 10 °, 35° x 10 ° and 60 ° x 25°, 12-24V AC/DC, 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-i4-1-c	VARIO2 i4-1-c- 3 angle options included 10° x 10 °, 35° x 10 ° and 60 ° x 25°, 12-24V AC/DC, black, 940nm (covert)	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
VAR2-i6-1	VARIO2 i6-1 - 3 angle options included 10° x 10 °, 35° x 10 ° and 60 ° x 25°, 12-24V AC/DC, 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-i8-1	VARIO2 i8-1 - 3 angle options included 10° x 10 °, 35° x 10 ° and 60 ° x 25°, 12-24V AC/DC, black, 850nm (730nm option)	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-i8-1-c	VARIO2 i8-1-c - 3 angle options included 10° x 10 °, 35° x 10 ° and 60 ° x 25°, 12-24V AC/DC, black, 940nm (covert)	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
VAR2-i16-1	VARIO2 i16-1 - 3 angle options included 10° x 10 °, 35° x 10 ° and 60 ° x 25°, 24V AC/DC, black, 850nm (730nm option)	10 x 10°	500m (1640ft)
		35 x 10° (Fitted as standard)	250m (820ft)
		60 x 25°	135m (443ft)
		80 x 30° (optional)	105m (344ft)
		120 x 50° (optional)	65m (213ft)
VAR2-i16-1-c	VARIO2 i16-1-c - 3 angle options included 10° x 10 °, 35° x 10 ° and 60 ° x 25°, 24V AC/DC, black, 940nm (covert)	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

Technical Specifications - Multipanel Illuminators

Illuminator	i2-2	i4-2	i4-3	i6-2	i6-3	i8-2	i8-3
Light Type	InfraRed						
Max Distance	120m (394ft)	220m (722ft)	260m (853ft)	282m (925ft)	346m (1135ft)	500m (1,640ft)	606m (1,988ft)
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	20W max	26W max (50W for 940nm variants)	39W max (75W for 940nm variants)	50W max	75W max	92W max	138W max
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	12	18 (24 for 940nm variants)	27 (36 for 940nm variants)	24	36	48	72
Wavelength	850nm, 940nm (covert), and 730nm options available						
IP rating	IP66						
Temperature Range	-50° to +50°C (-58°to +122°F)						
Colour	Black (white optional)						
Weight	1.5kg (3.3lbs)	2.25kg(5lbs)	3.75kg (8.3lbs)	2.25kg (5lbs)	3.75kg (8.3lbs)	4.5kg (9.9lbs)	6kg (13.2lbs)
Dimensions	159 x 144 x 131mm (6" x 5.7" x 5" approx)	209 x 178 x 131mm (8" x 7" x 5" approx)	318 x 182 x 188mm (12.5" x 7" x 7.4" approx)	209 x 178 x 131mm (8" x 7" x 5" approx)	318 x 182 x 188mm (12.5" x 7" x 7.4" approx)	279 x 223 x 131mm (11" x 9" x 5" approx)	423 x 225 x 201mm (17" x 9" x 8" approx)
Cable Length	2.5m (8.2ft)						
Bracketry	Adaptive illumination mounting bracket included						
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 • LED status indicator provides status on performance of the unit • Telemetry control • Restore factory default settings
Advanced Features (accessed via VARIO remote control)	• Timer function (up to 30 mins) • Remote dimming • Optional PIN to lock in settings and limit access • Remote Control can be disabled for improved security • Photocell sensitivity adjust • LED status indicator on/off • Disable programming mode

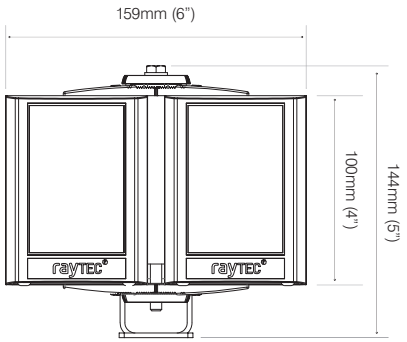
POWERS – The Open Lighting Standard

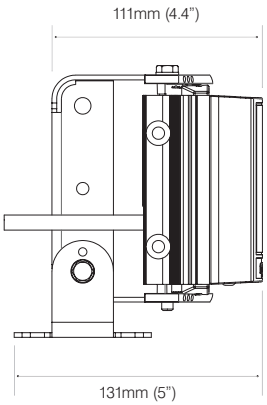
Specifications and distances based on the POWERS lighting standard.

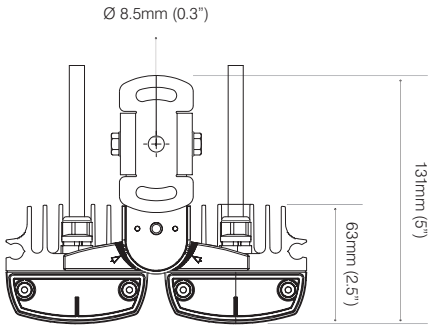
For full POWERS data and A&E specifications please contact sales@raytecled.com

Product Dimensions - Multipanel Illuminators

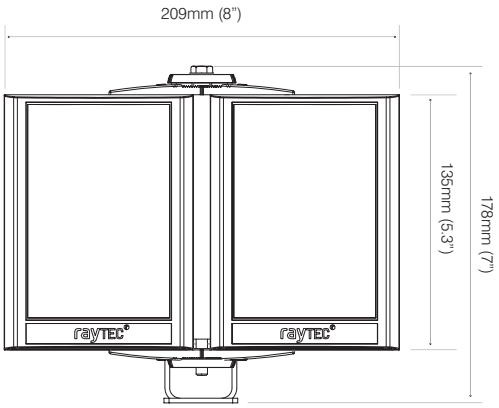
VAR2-i2-2

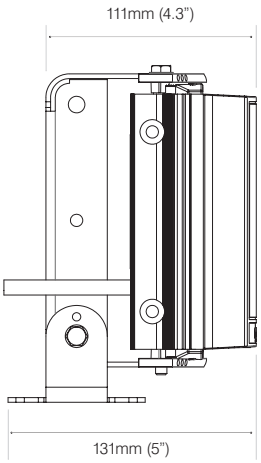


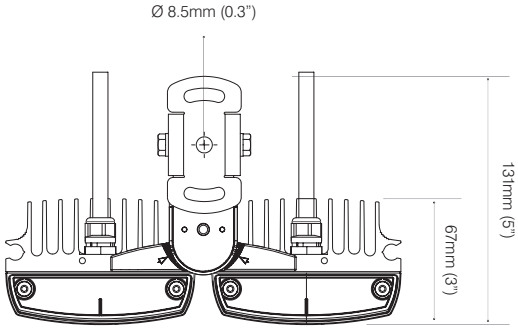




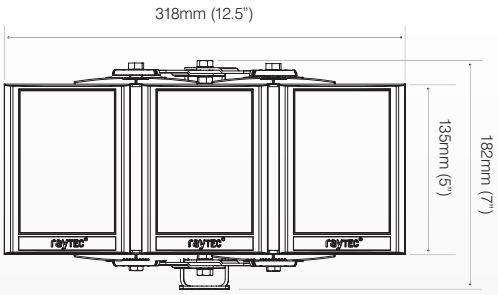
VAR2-i4-2

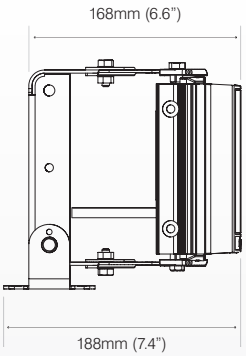


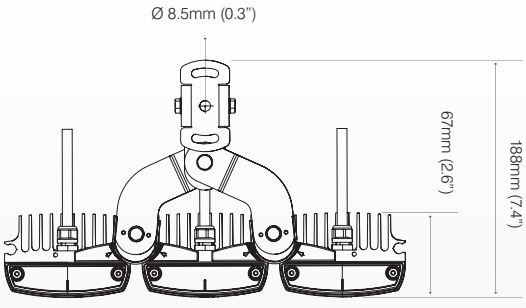




VAR2-i4-3

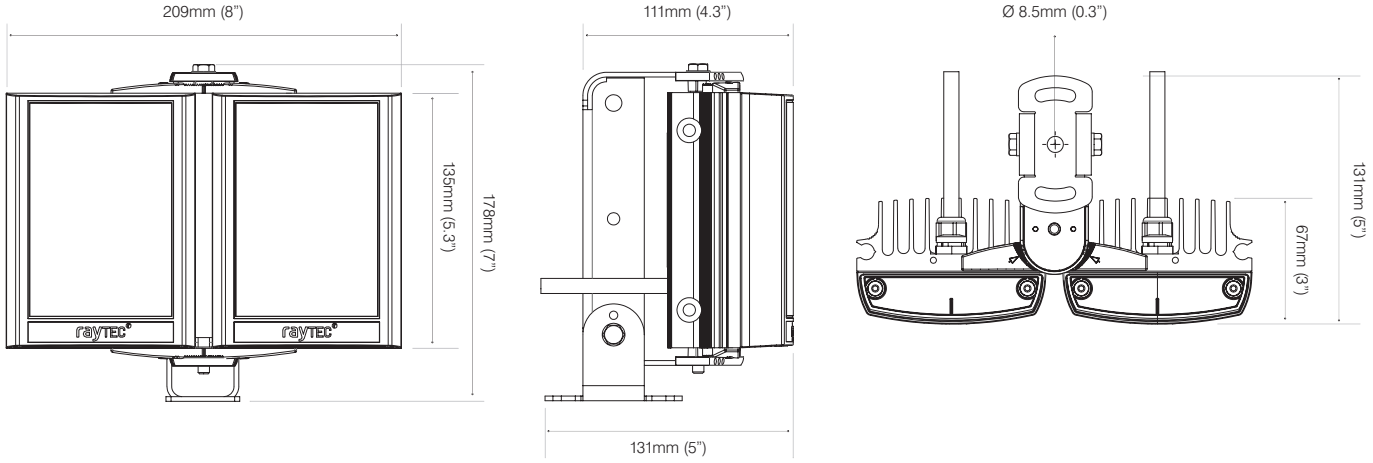




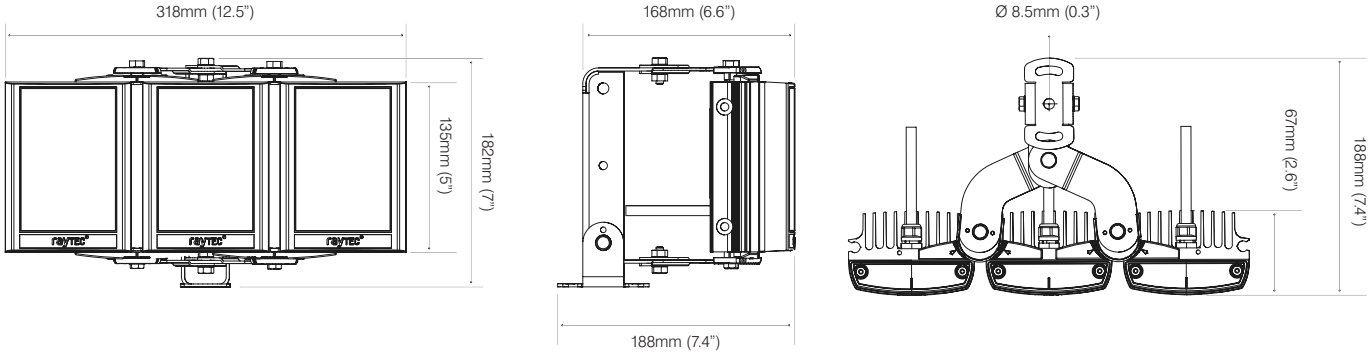


Product Dimensions - Multipanel Illuminators

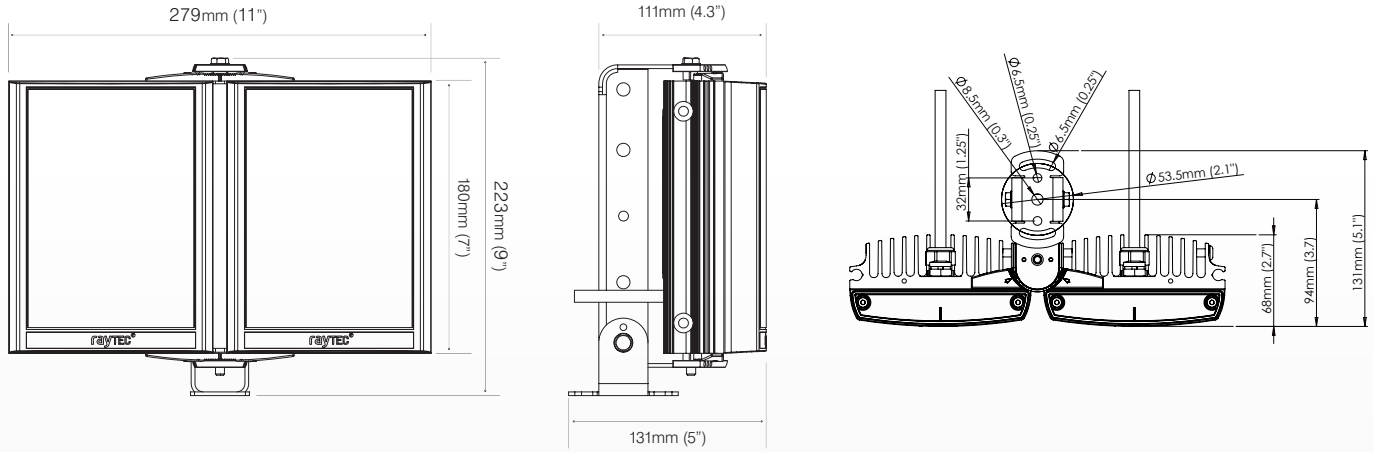
VAR2-i6-2



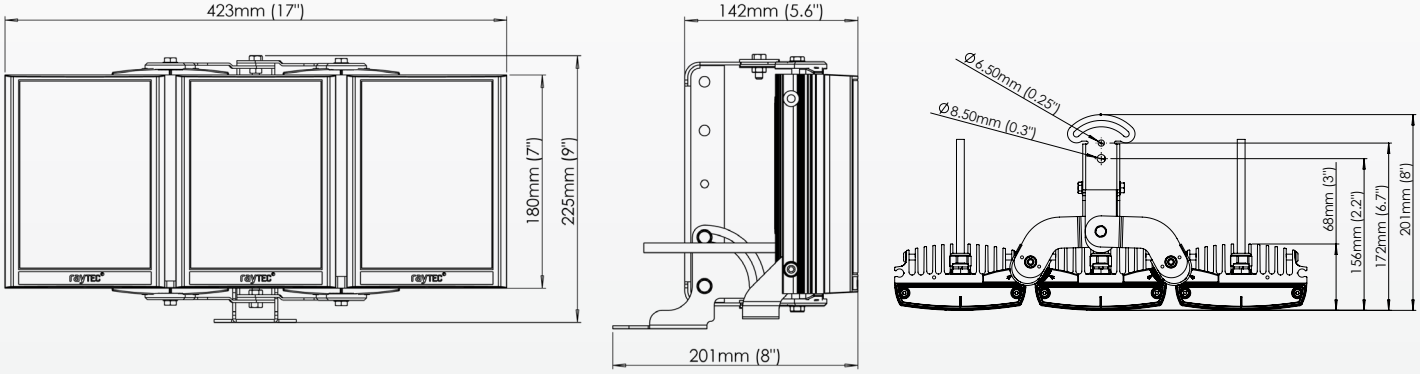
VAR2-i6-3



VAR2-i8-2



VAR2-i8-3



Product Codes - Multi Panel Illuminators

Part Codes	Description	Angles	Narrow Angle Distances	Wide Angle Distances
VAR2-i2-2	VARIO2 i2-2 Adaptive Illumination double panel, standard pack 10° x10 °, 35° x10° and 60° x 25° angles included, 12-24V AC/DC, black, 850nm	10 x 10°	120m (394ft) at 10°	85m (279ft) at 20°
		35 x 10° (Fitted as standard)	78m (256ft) at 35°	55m (180ft) at 70°
		60 x 25°	54m (177ft) at 60°	38m (125ft)at 120°
		80 x 30° (optional)	36m (118ft) at 80°	27m (89ft) at 140°
		120 x 50° (optional)	26m (85ft) at 120°	21m (69ft) at 180°
VAR2-i2-2-c	VARIO2 i2-2-c Adaptive Illumination double panel, standard pack 10° x10°, 35° x10° and 60° x 25° angles included, 12-24V AC/DC, black, 940nm	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	
VAR2-i4-2	VARIO2 i4-2 Adaptive Illumination double panel, standard pack 10 ° x10 °, 35° x10° and 60° x 25° angles included, 12-24V AC/DC, black, 850nm	10 x 10°	220m (722ft) at 10°	156m (512ft) at 20°
		35 x 10° (Fitted as standard)	120m (394ft at 35°	85m (279ft) at 70°
		60 x 25°	76m (249ft) at 60°	54m (177ft) at 120°
		80 x 30° (optional)	51m (167ft) at 80°	38m (125ft) at 140°
		120 x 50° (optional)	34m (112ft) at 120°	28m (92ft) at 180°
VAR2-i4-2-c	VARIO2 i4-2-c Adaptive Illumination double panel, standard pack 10° x10°, 35° x10° and 60° x 25° angles included, 12-24V AC/DC, black, 940nm	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	
VAR2-i4-3	VARIO2 i4-3 Adaptive Illumination triple panel, standard pack 10° x10°, 35° x10° and 60° x 25° angles included, 12-24V AC/DC, black, 850nm	10 x 10°	260m (853ft) at 10°	150m (492ft) at 30°
		35 x 10° (Fitted as standard)	145m (476ft) at 35°	85m (279ft) at 105°
		60 x 25°	93m (305ft) at 60°	54m (177ft) at 180°
		80 x 30° (optional)	62m (203ft) at 80°	42m (138ft) at 180°
		120 x 50° (optional)	42m (138ft) at 120°	34m (112ft) at 180°
VAR2-i4-3-c	VARIO2 i4-3-c Adaptive Illumination triple panel, standard pack 10° x10°, 35° x10° and 60° x 25° angles included, 12-24V AC/DC, black, 940nm	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	
VAR2-i6-2	VARIO2 i6-2 Adaptive Illumination double panel, standard pack 10° x10°, 35° x10° and 60 ° x 25° angles included, 12-24V AC/DC, black, 850nm	10 x 10°	282m (925ft) at 10°	200m (656ft) at 20°
		35 x 10° (Fitted as standard)	169m (554ft) at 35°	120m (394ft) at 70°
		60 x 25°	99m (325ft) at 60°	70m (230ft) at 120°
		80 x 30° (optional)	71m (233ft) at 80°	53m (174ft) at 140°
		120 x 50° (optional)	42m (138ft) at 120°	35m (115ft) at 180°
VAR2-i6-3	VARIO2 i6-3 Adaptive Illumination triple panel, standard pack 10° x10°, 35° x10° and 60° x 25° angles included, 12-24V AC/DC, black, 850nm	10 x 10°	346m (1135ft) at 10°	200m (656ft) at 30°
		35 x 10° (Fitted as standard)	208m (682ft) at 35°	120m (394ft) at 105°
		60 x 25°	121m (397ft) at 60°	70m (230ft) at 180°
		80 x 30° (optional)	87m (285ft) at 80°	58m (190ft) at 180°
		120 x 50° (optional)	52m (171ft) at 120°	42m (138ft) at 180°
VAR2-i8-2	VARIO2 i8-2 Adaptive Illumination double panel, standard pack 10° x10°, 35° x10° and 60° x 25° angles included, 12-24V AC/DC, black, 850nm, (730nm option)	10 x 10°	500m (1640ft) at 10°	354m (1161ft) at 20°
		35 x 10° (Fitted as standard)	240m (787ft) at 35°	170m (558ft) at 70°
		60 x 25°	135m (443ft) at 60°	95m (312ft) at 120°
		80 x 30° (optional)	100m (328ft) at 80°	76m (249ft) at 140°
		120 x 50° (optional)	65m (213ft) at 120°	53m (174ft) at 180°
VAR2-i8-2-c	VARIO i8-2-c Adaptive Illumination triple panel, standard pack 10° x10°, 35° x10° and 60° x 25° angles included, 12-24V AC/DC, black, 940nm	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	
VAR2-i8-3	VARIO2 i8-3 Adaptive Illumination triple panel, standard pack 10° x10°, 35° x10° and 60° x 25° angles included, 12-24V AC/DC, black, 850nm, (730nm option)	10 x 10°	606m (1988ft) at 10°	350m (1148ft) at 30°
		35 x 10° (Fitted as standard)	285m (935ft) at 35°	165m (541ft) at 105°
		60 x 25°	164m (538ft) at 60°	100m (328ft) at 180°
		80 x 30° (optional)	121m (397ft) at 80°	81m (266ft) at 180°
		120 x 50° (optional)	80m (262ft) at 120°	65m (213ft) at 180°
VAR2-i8-3-c	VARIO2 i8-3-c Adaptive Illumination triple panel, standard pack 10° x10°, 35° x10° and 60° x 25° angles included, 12-24V AC/DC, black, 940nm	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	

Part Codes - Optional Parts & Mounting Brackets

Optional Parts

PSU-VAR2- 20W-1	VARIO PSU - 100 to 230V AC Input, 24V DC Output, 20W, 1x Output
PSU-VAR2-50W-2	VARIO PSU - 100 to 230V AC Input, 24V DC Output, 50W, 2x Output
PSU-VAR2-100W-3	VARIO PSU - 100 to 230V AC Input, 24V DC Output, 100W, 3x Output
PSU-VAR2-150W-3	VARIO PSU - 100 to 230V AC Input, 24V DC Output, 150W, 3x Output

Mounting Brackets

VUB-WALL	VARIO Universal Bracket - Wall Mount, incl fixings
VUB-POLE	VARIO Universal Bracket - Pole Mount, incl fixings
VUB-PLATE 3X2	VUB Mounting Plate for 3 x Small VARIO
VUB-PLATE 3X4	VUB Mounting Plate for 3 x Medium VARIO
VUB-PLATE 3X8	VUB Mounting Plate for 3 x Large VARIO
VUB-PLATE 1X16	VUB Mounting Plate for 1 x i/w16 VARIO
VUB-PLATE-PSU	VUB Mounting Plate for VARIO PSU

Optional Parts

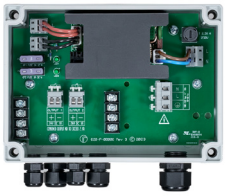
VAR-IX-lens-8030*	80 x 30° lens
VAR-IX-lens-12050*	120 x 50° lens
VAR-RC	Remote Control

*Replace X with lens size required

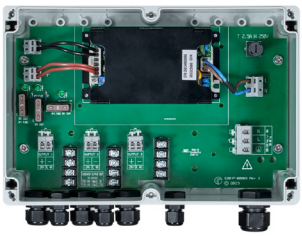
PSU Configuration



PSU-VAR2- 20W-1 (small)



PSU-VAR2-50W-2 (medium)



PSU-VAR2-100W-3 (large)



PSU-VAR2-150W-3 (x-large)

Illuminator Configurations	PSU-VAR2-20W-1 (small)	PSU-VAR2-50W-2 (medium)	PSU-VAR2-100W-3 (large)	PSU-VAR2-150W-3 (x-large)
Outputs	1 x 24V DC O/P	up to 2 x 24V DC O/P	up to 3 x 24V DC O/P	up to 3 x 24V DC O/P
Illuminators	1 x VARIO 2 series plus aux output (max 8W)	up to 2 x VARIO 4 series up to 2 x VARIO 6 series 1 x VARIO 8 series	up to 3 x VARIO 4 series up to 3 x VARIO 6 series up to 2 x VARIO 8 series	up to 3 x VARIO 8 series
Other Illuminator options		up to 4 x VARIO 2 series*	up to 8 x VARIO 2 series* up to 4 x VARIO 4 series* up to 4 x VARIO 6 series* 1 x VARIO 16 series	up to 6 x VARIO 4 series* up to 6 x VARIO 6 series* 1 x VARIO 16 series

Please note: for medium, large and x-large PSUs powering an increased number of VARIO illuminators, the total power of the illuminators must not exceed 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-VAR2-50W-2 can also run 2 x VARIO 2 series and 1 x VARIO 4 series subject always to maximum PSU output

Disclaimer

The information provided in this document was accurate at the time of its creation. However, due to the evolving nature of our products and continuous improvements, there may be changes or updates that occur after its publication. For the most current and detailed information about our products, please contact our sales team at sales@raytecled.com.