

## Pulsestar VCT High Intensity Pulsed Lighting for Transport and Rail



**VCT6**



**VCT6-T20**

- High intensity - up to 0.5kW lighting drive power
- Highly flexible and configurable
- Ethernet control
- Long lifetime and low maintenance
- Easy camera integration
- 12V to 24V DC as standard
- Compact housing or board-only variants

PULSESTAR VCT Infra-Red illuminators are designed for mobile and fixed transport applications, including traffic and rail installations. VCT is available with a compact IP65 housing, or as a board-only version; both allow easy integration with OEM systems.

Using high-power LED technology, VCT illuminators deliver up to 0.5kW of lighting drive power to provide outstanding illumination. A fully integrated GUI means the power, duration and frequency of the pulse can all be adjusted and tailored to each application.

A trigger input means the illuminator can be connected to a camera and synchronised with its shutter to deliver maximum light levels, exactly when needed. Increasing the lifetime of the illuminator and reducing maintenance, the VCT is perfect for difficult to reach transport applications.

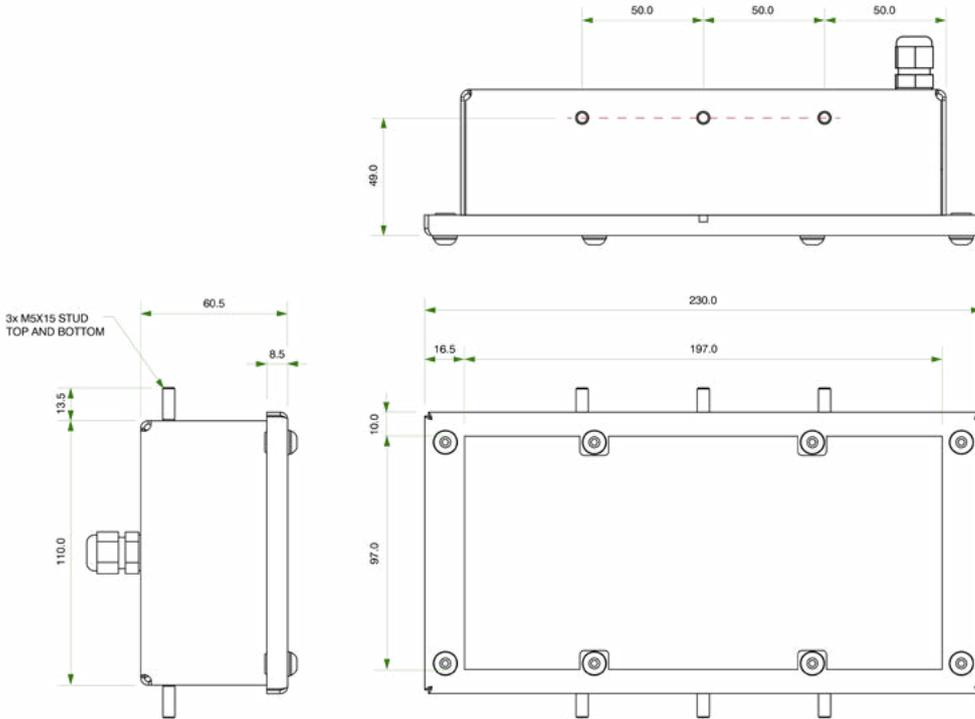
Features	Benefits
High Intensity Pulsed Illumination	Delivering up to 0.5kW of lighting drive power, PULSESTAR VCT illuminators deliver high quality pulsed illumination. Pulsed illumination ensures the highest levels of light on-scene to illuminate fast moving objects, and provides a significant uplift in performance compared to equivalent non-pulsed illuminators.
OEM Integration	PULSESTAR VCT illuminators are specifically designed for easy OEM integration with a range of ITS systems. The VCT6-T20 (board-only variant) comes with an integral aluminium plate which can be attached to a to heat-sink.
Integrated Pulse Controller	PULSESTAR VCT illuminators are packaged in a single, compact housing. The integrated pulse controller allows the timing, height and width of the lighting pulse to be tailored for the exact needs of the application. An ethernet-based communication interface and GUI makes installation, operation and maintenance both safer and easier.
Camera Sync	A trigger input allows the illumination to be pulsed in synchronisation with the camera shutter to deliver maximum light levels precisely when needed. The trigger output from the illuminator can be used to control the timing of the camera, or other illuminators.
Reduced Running Costs	When synced with a cameras shutter, VCT illuminators are only turned on for the duration of its 'pulse'; a fraction of the time when compared to a constant light solution. This means running cost can be significantly reduced.
Longer Life	PULSESTAR VCT illuminators can deliver a significantly longer lifetime when compared to a constant light illuminator. Pulsing an LED illuminator can increase the operational life of the LEDs (lifetime is governed by the average operating temperature of the LED, not the number of times it is switched on and off).
Choice of Wavelengths	The VCT illuminators are available in Infra-Red or White Light. A range of beam patterns are also available which allows VCT illuminators to be tailored towards a wide range of applications.

# Technical Specifications

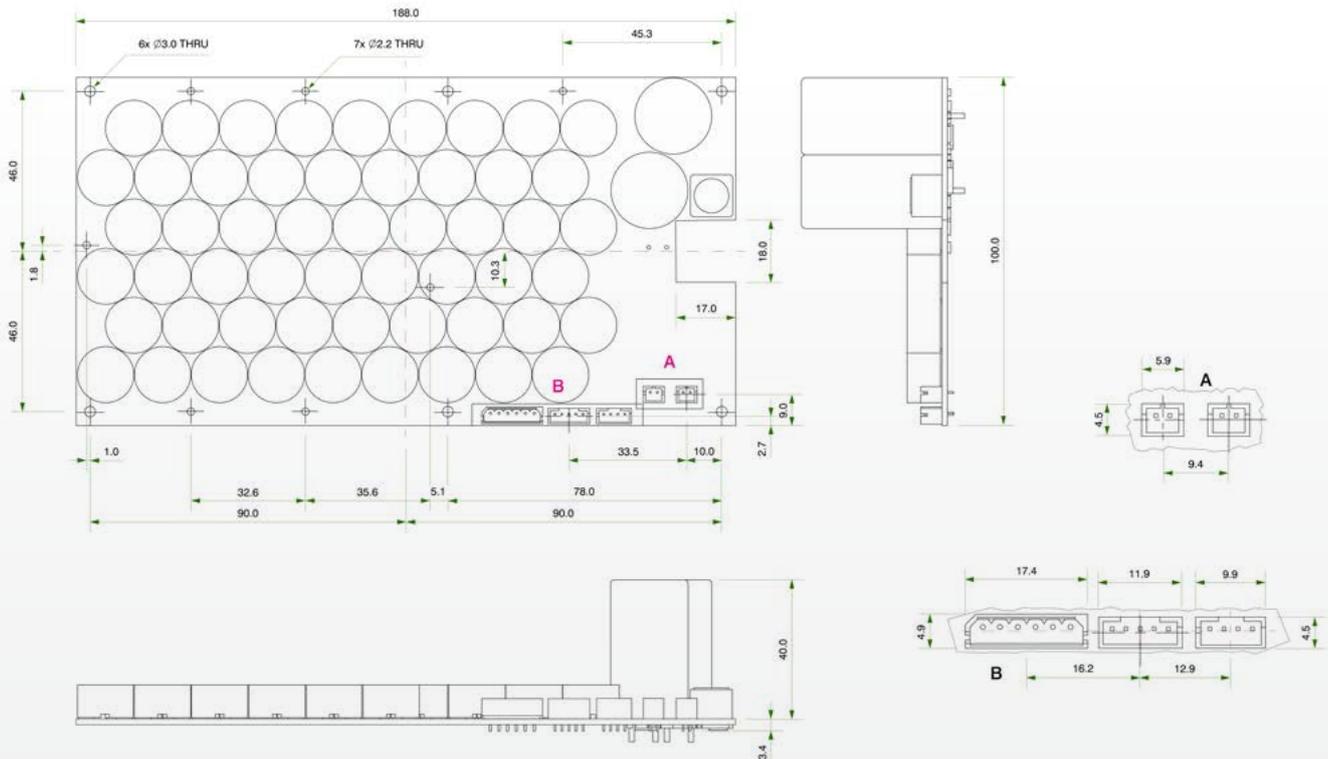
Model	VCT6-850NM	VCT6-T20-850NM	VCT6-WL	VCT6-T20-WL
Lighting Drive Power	0.5kW Pulsed			
Consumption (Average)	15W		5W	
Number of LEDs	45			
Input	12-24V DC			
LED Type	Platinum Elite twin-core SMT LEDs		Platinum Elite SMT LEDs	
Illumination Angle	14° or 28° (other angles available on request)		12° or 28° (other angles available on request)	
Beam Shape	Circular			
Maximum Pulse Width (100%)	2ms		1ms	
Maximum Trigger Frequency	10kHz			
Maximum Duty Cycle at 100% Intensity	3%		1%	
Trigger Input	5V to 24V opto-isolated			
Trigger Output	Synchronised to strobing, (24V, 20mA opto-isolated)			
Control / Communication	Ethernet			
Wavelength	850nm		White-Light	
IP Rating	IP65	IP20	IP65	IP20
Temperature Range	-20°C to +55°C (-4°F to +131°F)			
Colour	Black	N/A	Black	N/A
Weight	1kg (2.2lb)	0.4kg (0.88lb)	1kg (2.2lb)	0.4kg (0.88lb)
Dimensions	See dimensional sketches			
Front Cover	Clear Polycarbonate	N/A	Clear Polycarbonate	N/A
Cable	2m pre-wired	N/A	2m pre-wired	N/A
Warranty	1 Year			
Installation Instructions	Please see document 1140-D-00008 at Rayteclcd.com			
Country of Manufacture	United Kingdom			

# Product Dimensions

## VCT6



## VCT6-T20 (Board-Only)



## Product Codes

Part Codes	Description
VCT6-850-14-ETH	PULSESTAR VCT6 Pulsed 850nm, 14° beam, 12/24V DC, 2m fixed cable
VCT6-850-28-ETH	PULSESTAR VCT6 Pulsed 850nm, 28° beam, 12/24V DC, 2m fixed cable
VCT6-850-14-ETH-T20	PULSESTAR VCT6 T20 Pulsed 850nm, board only version, 14° beam, 12/24V DC, no cable
VCT6-850-28-ETH-T20	PULSESTAR VCT6 T20 Pulsed 850nm, board only version, 28° beam, 12/24V DC, no cable
VCT6-W-12-ETH	PULSESTAR VCT6 Pulsed WL, 12° beam, 12/24V DC, 2m fixed cable
VCT6-W-28-ETH	PULSESTAR VCT6 Pulsed W, 28° beam, 12/24V DC, 2m fixed cable
VCT6-W-12-ETH-T20	PULSESTAR VCT6 T20 Pulsed W, board only version, 12° beam, 12/24V DC, no cable
VCT6-W-28-ETH-T20	PULSESTAR VCT6 T20 Pulsed WL, board only version, 28° beam, 12/24V DC, no cable

## 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@rayteclcd.com](mailto:sales@rayteclcd.com).