

# Elite CLS LED Signal Head

Lower energy consumption reduces carbon footprint.

230VAC and 48VAC options available



The Elite CLS LED signal combines Peek's proven Elite lens technology with a reliable Central Light Source LED illumination solution. This results in a unit with improved reliability, reduced operating costs and better optical performance when compared to standard halogen or earlier generation LED signals.

## Energy Efficiency

By using the latest in LED technology the Elite CLS LED power usage is far lower than a conventional halogen lamp, resulting in lower operating costs and reducing the environmental impact. Power savings of up to 80% are achievable compared to standard halogen lamps, helping to reduce running costs and maintenance requirements. The Extra Low Voltage (ELV) version also offers the additional benefit of improved on-street safety. This signal technology supports clients looking to deliver safety at the roadside whilst reducing the environmental impact of their traffic infrastructure.

## Optical Performance

The Elite CLS LED uses the proven Peek Elite lens ensuring uniform illumination. This directs the light where it is required resulting in a more visible optic. Use of the Peek Elite lens ensures that the Elite CLS LED signal maintains both a high sun phantom contrast performance (highest available class) and a good anti-washout performance.

## Retrofitting

The Elite CLS LED module has the same mechanical interface as Peek's existing Elite optics and fits into the same signal door. As a result the CLS is easily retro-fitted into existing Elite signal bodies on street, offering additional environmental and cost benefits.

## Key Features

- Central Light Source architecture
- Reduced energy consumption
- Long lifespan and highly reliable
- Integrated LED monitoring
- Elite CLS LED Module retrofits into existing Peek Elite Signals
- Bright and highly visible illumination
- Uniform optical output
- Maintains both a high level of phantom contrast and a good anti-washout performance
- Specifically designed to meet European and UK standards
- Range includes 200mm red, amber and green and 300mm white (regulatory)
- White regulatory available as 48VAC and can be used with 230VAC (optional transformer kit required)

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## Controller Lamp Monitoring

The Elite CLS LED signal continuously monitors its own LED components. If failure occurs the internal fuse ruptures within the LED optic module itself.

Maximum power efficiency is achieved when the signals are driven by a PTC-1® controller as this provides full integral lamp monitoring without the need for any additional components.

An optional Lamp Emulation Module is also available that enables the 230V Elite CLS LED to be used with other controllers including Peek's TSC3, TSP, TRX and Siemens' ST800/ST900. This unit monitors the current drawn by the optic and in the event of a failure, ceases to provide halogen emulation to the controller, enabling the controller to detect the fault.

## Mechanical Configuration

The Elite CLS LED signal module uses the same components, injection moulded from polypropylene, as the standard Peek Elite traffic signal. Therefore they can be configured in the same way.

Four secure locks allow the door to hinge from either the left or the right sides as well as allowing complete removal. Once the door is opened the complete cavity is easily accessible for maintenance. The door contains the complete optical assembly as well as an interface for fitting visors or similar accessories.



## Environmental Credentials

	Exelon Codes	Watts	Annual kW: Hr	CO2 kg pa
230VAC 3 aspect vehicle	79 41 013 000 100	13	114	61
230VAC 2 aspect pedestrian	79 39 012 000 100	12	105	56
230VAC CLS 1 aspect filter	79 45 012 000 100	12	105	56
ELV 3 aspect vehicle	79 41 011 000 100	11	96	52
ELV Regulatory Sign	79 48 011 000 100	11	96	52

## Specifications

<b>Technology:</b>	High intensity LED		
<b>Specifications:</b>			
<b>United Kingdom:</b>	TSRGD 2002 defining the UK classes TS50509 (48VAC)		
<b>Europe:</b>	BSEN12368 HD638		
<b>EMC:</b>	BSEN50293		
<b>BSEN:</b>	12899:2007 (300mm white regulatory)		
<b>Luminous intensity:</b>	Class 3/2 400-2500 cd		
<b>Angular distribution:</b>	Table 4 Medium Wide Beam		
<b>Luminous uniformity:</b>	1:10		
<b>Sun phantom:</b>	Class 5		
<b>Operating temperature:</b>	-15°C to +60°C		
<b>Power Supply:</b>	<b>230V</b>	<b>48V</b>	
<b>Bright illumination:</b>	230VAC	48VAC	Nominal 50Hz
<b>Dim illumination:</b>	160VAC	28VAC	Nominal 50Hz
<b>Full supply range:</b>	108 to 276	22 to 58	VAC
<b>Typical Power Consumption (all colours and no emulation):</b>			
<b>Bright</b>	12W	12W	
<b>Dim</b>	6W	6W	
<b>Bright/Dim threshold:</b>	180-195 VAC	33-36 VAC	
<b>Operating frequency:</b>	45-55HZ	45-55HZ	
<b>Power factor:</b>	>0.95	>0.95	
<b>Switch-off time (fault):</b>	<200ms	<200ms	



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Peek is a leading supplier of intelligent transport solutions. For more than 30 years, the firm has been providing advanced traffic control products and systems, management and maintenance services for both the urban and highways markets. Peek's established and proven portfolio includes traffic management systems incorporating SCOOT, highway congestion management and enforcement systems, vehicle detection systems, exterior lighting, as well as supervisory and communications systems. Peek is ISO 9001:2008 and ISO 14001:2004 certified.

With headquarters in Basingstoke, Hampshire, Peek employs more than 500 staff throughout the UK. Peek is part of the Traffic and Infra division of Imtech NV, a global technology services provider based in the Netherlands.

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