The Helios range of traffic signals is renowned for delivering optimum clarity, physical appearance and reliability. Operating at standard 230V and 48V ELV, the range features a choice of head options including Siemens' SIRA style enhanced optics and the latest LED Central Light Source (CLS). Helios ELV signals offer the additional benefit of very low power consumption, reduced energy costs and improved safety on-street.

Helios traffic signals are extremely attractive, incorporate modern design features and their modular construction offers a wide choice of assembly options.

Advanced LED light source

The Helios family of traffic signals includes standard tungsten halogen optics and the latest generation low power CLS optics. When operating at ELV levels, the signals are able to achieve an average consumption of less than 8 watts.

Employing a highly developed SIRA style lens, the optic provides maximum transmission of illumination whilst ensuring that extraneous light is not reflected back to the viewer when the signals are switched off. The result is a signal that is extremely clear and easy to see in all weather and lighting conditions.

An innovative internal masking arrangement allows symbols such as filter arrows to be easily implemented without the need for these to be screened onto the optic. This gives great flexibility for on-site adjustment, together with the ability to easily convert 'standard' signals to arrows and symbols if this becomes necessary. In addition to standard tube-based regulatory signs, the Helios ELV signals offer a wide range of long-life LED-based symbols, all driven at 48V.

Lamp monitoring compatibility

Helios' Central Light Source offers a highly reliable LED signal, but defects in street cables and terminations mean that signal failures may still occur and lamp monitoring is therefore recommended.

Utilising Siemens' patented lamp monitoring technology, the standard 230V Helios CLS can be monitored by a wide range of Siemens equipment. This allows incandescent signals to be replaced with LED optics, eliminating the need for expensive street cable or controller alterations.

- Highly reliable Central Light Source technology for extended life
- Very low power consumption offering reduced energy costs
- Standard and ELV versions
- Improved safety on-street
- Robust, vandal-resistant construction
- Superior head mounting arrangement for precise tilting and rotation
- Unique anti-impact feature to prevent damage from glancing impacts
- Fully lamp monitorable

Helios
traffic signals

Traffic Solutions

SIEMENS

The 48V ELV version of the signal complements the new Siemens ST900 ELV controller, which offers full lamp monitoring of ELV signals.

Robust modern design hoods

Helios hoods are moulded in a flexible yet robust polymer, ensuring exceptional resistance to damage and great dimensional stability. A unique indexing feature on both primary and secondary hoods facilitates precision location. A wide range of louvered hoods may be fitted, providing extra screening where visibility needs to be further restricted, and optional anti-vandal screens are also available for sites where lens damage is common.

Modular design

Helios has been designed in a modular format, to provide traffic engineers with maximum flexibility to meet the demands of modern intersection control strategies. Typical options include left and right arrows as well as four-inline signals.

Mounting arrangements

The signal head features an improved mounting arrangement, allowing simple tilting and rotation to be achieved during installation. Additionally, the rotating mechanism incorporates a unique anti-impact feature, providing protection against damage from glancing impacts.

Backing boards and internal components

The simple and robust design of the backing boards further ensures high resistance to impact damage. The internal design accommodates a range of equipment, including audible drive circuits and tactile power supplies.

Technical specification

Optical performance

- Certified to EN12368, performance class 3/2
- Phantom ratio: Class 5 (better than 16:1)
- Output intensity: Type M class A (400 cd)

Optic sizes

- Standard optic: 200mm with SIRA lens
- Regulatory sign: 290mm

Illumination methods

Standard signals:

- High intensity tungsten halogen lamps
- Standard 230V Central Light Source LED array with automatic LED failure detection
  - Signal dimming: 140V and 160V
  - Optional lamp monitoring, compatible with Siemens ST800, ST700, T500, T400P, T400 Ancillary Processor/OTU, TC12 OTU, Gemini OMU, 3U OMU, 5U OMU, free-standing lamp monitor unit
- Twin fluorescent tube regulatory signs

ELV signals:

- 48V (ELV) Central Light Source LED array with automatic LED failure detection
  - Signal dimming: 27.5V
  - Integrated lamp monitoring, compatible with Siemens ST900
- 48V long-life LED regulatory signs

Modular construction options

- Single, two, three and four aspect assemblies
- Flexible options for side boxes and other requirements
- Will accommodate a wide range of louvered hoods
- Backing boards available for all construction options
- Retro-reflective edging
- Anti-vandal lens screen

Power consumption

Helios CLS ELV - with lamp monitoring

	Bright	Dim
Red aspect	11W	3W
Amber aspect	11W	3W
Green aspect	11W	3W
LED regulatory sign	12W	

Helios CLS - with lamp monitoring

	Bright	Dim
Red aspect	28W	12W
Amber aspect	28W	12W
Green aspect	28W	13W

Helios high intensity incandescent

	Bright	Dim
Red aspect	54W	23W
Amber aspect	54W	23W
Green aspect	54W	23W

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