

# Yutraffic Actis Traffic Signals

**Product Datasheet** 



#### Overview

The all-new Yutraffic Actis LED traffic signal incorporates modern design features to deliver superior performance, with a very low power consumption and reduced carbon footprint. Actis is a modular system that provides a complete and attractive traffic signal range, including a variety of different pole mounting options. Actis sets the new standard in traffic signals design, performance and sustainability, and meets the requirements of any traffic signal installation.

#### Solution features

- New optical system utilises central light source technology to optimise visibility and efficiency
- Range of power variants support existing and new installations; LV LED (230V), ELV (48V), ELV Low Power (48V) and Plus+ (48V)
- Modular design includes a 3-aspect uni-body and single aspect body which can be combined into any configuration from 1 to 5-in-line
- Two pole mounting options include a new pintle mount system offering a range of benefits including easier installation and reduced working at height
- Signal head doors open from either side providing unrivalled ease of access
- Accommodates a wide range of hoods and backing boards, with hoods and backing boards also compatible with Helios
- Integrated air quality sensor option
- Backward compatibility with Helios; Actis doors fit on the existing Helios bodies, and Actis aspects utilise the same lamp monitoring profiles as Helios LED signals
- Tool free replaceable aspect hatch improves ease of maintenance

#### Solution benefits

- Very low power consumption (as low as 1W for Plus+ variants) offering reduced energy costs and lower carbon footprint
- Improved safety on-street with a significant reduction in weight and reduced working at height installation, using the pintle mount system
- Robust, vandal-resistant construction
- Highly sustainable with a large use of recycled materials in the construction, and removal of bonded parts making the product fully recyclable at end of life
- Fully lamp monitorable from Yunex Traffic signal controllers
- Made in the UK

## **Technical Specification**

Standards	<ul> <li>Tested and certified to</li> <li>Optical performance as per EN12368 Traffic Control Equipment – Signal Heads</li> <li>Electromagnetic Compatibility as per EN50293 Road Traffic Signal Systems</li> <li>Environmental performance and safety as per EN50556 Road Traffic Signal Systems</li> </ul>	
Product Conformance	CE     UKCA	
Optical Performance	With reference to EN12368 for 200mm signals  Luminous intensity: Performance Level 3 Class 2  Luminous intensity distribution: Type M  Luminous Uniformity: >1:10  Phantom class: 5  Symbol class: S1  Impact resistance: IR2  Ingress protection: IP55  Environmental class: A	
Power Variants	<ul> <li>LV (Low Voltage 230V)</li> <li>ELV (Extra Low Voltage 48V)</li> <li>ELV LP (Extra Low Voltage 48V Low Power)</li> <li>Plus+</li> </ul>	
Optic Sizes	<ul> <li>Standard optic: 200mm</li> <li>Regulatory sign: 290mm</li> </ul>	
Modular construction options	<ul> <li>Fully modular options to create 1, 2, 3, 4 and 5 in line signals with additional side mount aspects</li> <li>3-aspect unibody with single door (3 × 200mm aspects)</li> <li>Single aspect body with 200mm or 290mm regulatory sign door</li> <li>Will accommodate a wide range of louvered hoods</li> <li>Backing boards available for all construction options</li> </ul>	
LV Signals	<ul> <li>230V (LV) Central Light Source LED with automatic LED failure detection, signal dimming, integrated lamp monitoring</li> <li>Compatible with Yunex LV LED controllers and LED retrofit solutions</li> <li>230V LED regulatory signs</li> </ul>	
ELV Signals	<ul> <li>48V (ELV) Central Light Source with automatic LED failure detection, signal dimming, integrated lamp monitoring</li> <li>Compatible with Yunex ST750ELV, ST900ELV and ST950ELV</li> <li>48V LED regulatory signs</li> </ul>	
ELV LP Signals	<ul> <li>48V (ELV) Central Light Source with automatic LED failure detection, signal dimming, integrated lamp monitoring</li> <li>Compatible with Yunex ST950ELV with minimum V30 Firmware</li> <li>48V LED regulatory signs</li> </ul>	
Plus+ Signals	<ul> <li>ELV supply compatible with Plus+</li> <li>Signal dimming controlled electronically from ST950 Plus+ controller</li> <li>Fully integrated lamp monitoring</li> </ul>	
Mask inserts	Mask inserts are available for; arrow, standing figure, walking figure, cycle, equestrian and bus	
Regulatory sign inserts	Regulatory door signs are available for all approved sign types	

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Power consumption of LED Red, Amber and Green aspects	<ul> <li>Actis LV Aspects: Bright (230V) 11W, Dim (160V) 4.5W</li> <li>Actis ELV Aspects: Bright (48V) 10W, Dim (27.5V) 3W</li> <li>Actis ELV LP Aspects: Bright (48V) 5W, Dim (27.5V) 1.5W</li> <li>Actis Plus+ Aspects: Bright 3W, Dim 1W</li> </ul>		
Power consumption of signs	<ul> <li>Actis LV LED Regulatory Sign: (230V) 10W</li> <li>Actis ELV LED Regulatory Sign: (48V) 8W</li> <li>Actis Plus+ Regulatory: Sign 5W</li> <li>Actis PCaTS: 14W</li> </ul>		
Weights	Signals  • 3-aspect 200mm signal head: 7.6k  • 3-aspect 200mm Plus+ signal head  • 2-aspect 200mm signal head: 6.3k  • Regulatory sign: 4.0kg  • Single 200mm RAG aspect: 2.25kg	d: 8.0kg kg	
	<ul> <li>Pintle Brackets (1-set)</li> <li>2-in-line standard: 1.2kg</li> <li>2-in-line handed: 1.8kg</li> <li>3 &amp; 4-in-line standard: 0.5kg</li> <li>3 &amp; 4-in-line handed: 1.2kg</li> </ul>		
	Adjustable Brackets (1-set)  1-in-line: 1.2kg  2-in-line: 1.7kg  3-in-line: 1.2kg  4-in-line: 2.2kg  5-in-line: 3.8kg  2-in-line (extended): 1.3kg  3-in-line (extended): 1.7kg  4-in-line (extended): 2.7kg		
Dimensions (with backing boards)	<ul> <li>Single aspect</li> <li>2 in-line</li> <li>3 in-line</li> <li>4 in-line</li> <li>3 in-line with one side aspect</li> <li>3 in-line with two side aspects</li> </ul>	H: 450mm H: 785mm H: 1116mm H: 1450mm H: 1116mm H: 1116mm	W: 468mm W: 468mm W: 468mm W: 468mm W: 841mm W: 1214mm
Design Dimensions	Distance from pole to front of hood (without rotation)  Using adjustable bracket: 543mm  Using extended adjustable bracket: 613mm		
Product Materials	<ul> <li>Actis signal bodies, doors, backing boards, hoods: Recycled polypropylene</li> <li>Actis aspect bodies and rear hatch: Recycled polycarbonate</li> <li>Actis lenses: Polycarbonate</li> <li>Pintle signal bracket assembly: Glass reinforced nylon</li> <li>Adjustable bracket signal assembly: Glass reinforced nylon</li> <li>Pintle pole brackets: 316 stainless steel</li> <li>Pintle pole brackets (black): 316 stainless steel with black powder paint coat</li> <li>Adjustable pole brackets: S275JR galvanised mild steel with black power paint coat</li> </ul>		

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End of life recycling guidance	<ul> <li>Recycled and non-recycled polypropylene parts can be widely recycled</li> <li>Recycled and non-recycled polycarbonate parts can be widely recycled</li> <li>Glass reinforced nylon parts can be recycled</li> <li>Stainless steel (unpainted) parts can be widely recycled</li> <li>Stainless steel (painted) parts can be widely recycled following paint removal</li> <li>Mild steel (painted) parts can be widely recycled following paint removal</li> <li>Electronics parts including cabling are widely recycled</li> </ul>	
Bracket options	<ul> <li>Pintle</li> <li>Adjustable</li> <li>Use standard pole mounting positions</li> </ul>	
Horizontal adjustment	<ul> <li>Horizontal rotation (to left and right)</li> <li>Pintle bracket standard: 50°</li> <li>Pintle bracket handed: 90°</li> <li>Adjustable bracket: 86°</li> <li>Adjustable extended bracket: 90°</li> </ul>	
Vertical adjustment	<ul> <li>Vertical adjustment is not usually required due to the optimised lens system, however Actis can be adjusted ±3° using the adjustable bracket mounting system</li> </ul>	
Handbook	For further details refer to the Yutraffic Actis Handbook 667/HB/60000/000	

### **Elexon Code**

Description		Charge Code
3-Aspect	Actis ELV LP Signal Head: 3-Aspect (Red/Amber/Green)	79 4000 6000 100
	Actis Plus+ Signal Head: 3-Aspect (Red/Amber/Green)	79 4000 7002 100
	Actis ELV Signal Head: 3-Aspect (Red/Amber/Green)	79 4001 2001 100
	Actis LV Signal Head: 3-Aspect (Red/Amber/Green)	79 4001 3002 100
2-Aspect	Actis ELV LP Signal Head: 2-Aspect (Red/Green)	79 4200 5001 100
	Actis Plus+ Signal Head: 2-Aspect (Red/Green)	79 4200 6000 100
	Actis ELV Signal Head: 2-Aspect (Red/Green)	79 4201 0003 100
	Actis LV Signal Head: 2-Aspect (Red/Green)	79 4201 1000 100
1-Aspect	Actis Plus+ Signal Head: 1-Aspect (Green)	79 4400 3000 100
	Actis ELV LP Signal Head: 1-Aspect (Green)	79 4400 5000 100
	Actis ELV Signal Head: 1-Aspect (Green)	79 4401 0003 100
	Actis LV Signal Head: 1-Aspect (Green)	79 4401 1000 100
Signs	Actis LV LED Regulatory Sign	40 0008 0020 100
	Actis ELV LED Regulatory Sign	40 0010 0012 100
	Actis Plus+ LED Regulatory Sign	79 1700 5000 100
	Actis PCaTS	79 6001 2001 100

For complete information on Elexon codes please refer to Yunex document 667/RE/29050/000 or the Elexon code website