Siemens Elektra variable message sign family provides highly visible and concise information to drivers, enabling them to be better informed, reducing traffic congestion and journey times while lowering pollution levels from queuing traffic. Elektra offers a highly configurable, adaptable and flexible solution to meet the requirements of variable message signs in a wide variety of different situations.

**Elektra benefits**

The Elektra family of variable message signs brings a number of key benefits to all styles of installation, whether car park, traffic information or for other information applications. Approved to the latest EN12966 specification for environmental and optical performance, Elektra is compatible with Siemens Comet and other UTMC traffic management systems.

Elektra offers a range of different display sizes from 100mm characters up to 320mm characters. The use of modern, surface mount technology ensures accurate alignment of display modules along with the latest low power control electronics to minimise the power consumption of the sign when installed. All signs in the Elektra family offer monitoring of individual pixels across the entire display with intelligent character displays allowing easy plug and play configuration for engineers, minimising the time required on site for any maintenance activities.

A new range of enclosures offers easy access for maintenance along with flexible mounting options, including traditional multi-pole installation and a range of monopole options for installation in constrained locations. As standard Siemens Elektra includes sealed enclosures to IP55 with integral work positioning attachments for safe working during installation, commission and maintenance.

Integral to the Elektra signs is the proven Siemens Gemini outstation processor with full support for Siemens Outstation Support Server (OSS) to manage Elektra VMS alongside existing Gemini UTMC outstations. The integration of the Gemini outstation into Elektra provides commonality of spares and reduces the need for engineers to carry a wide range of spare parts. Maintenance and diagnostics are easily accessed using a web browser display which can also be accessed remotely from the instation to provide valuable additional information to maintenance engineers.

**Driver information signs**

Driver information signs are available in a variety of different character sizes and line lengths, and can be supplied with or without flashing LED lanterns. The front fascias can be completed with a variety of different finishes to suit local branding and conditions, providing a sympathetic addition to the existing street scene.
Installation and maintenance

Elektra is available with a flexible range of installation options with traditional multi-pole installations complemented by a range of monopole and cantilevered sign structures. Cantilevered sign structures can also be supplied with elevation adjustment to accommodate specific installation requirements with minimum effort. With integral work positioning attachments and wide, rear access doors ongoing maintenance and support of Elektra VMS is both straightforward and safe for engineers.

Total solution

Siemens provides customers with a total solution for variable message sign systems including all civil engineering works, traffic management, installation and commissioning. For large projects, we can manage the entire process using our own qualified Siemens project managers who oversee all aspects of the project, including where necessary sub-contractors and third parties, through to successful completion.

Car park guidance signs

Car park signs can be supplied with multiples of 3 character modules, typically arranged in rows of 6 or 12 characters with each car park or zone being represented by a single line. Elektra offers a variety of different character options, including variable direction arrows to provide additional information about alternative parking locations using dynamic guidance.

Control

Siemens Elektra supports the latest version of the UTMC specification TS004.005:2009 for variable message signs and can be controlled by any UTMC compliant instation using this interface. For a complete integrated UTMC solution from Siemens, Elektra can be implemented with Siemens UTMC traffic management systems and Gemini UTMC car park outstations where necessary for fully automated car park information and guidance, along with traffic information displays providing real time updates to drivers on current road conditions.

Communications

Elektra provides a flexible hardware design which allows the straightforward integration of communications devices directly within the sign enclosure, minimising the requirement for additional street furniture. Options available with Elektra for UTMC communications include Ethernet (Wireless and fixed), Fibre, DSL, ADSL and GPRS/3G modems. Elektra also includes an option of a built-in VPN tunnel for use when connected over the public internet to ensure security of control with minimal additional infrastructure. Other options supporting legacy protocols and communication devices are also available to provide easy upgrades and additions to existing systems.
Technical specification

Electrical
Input power supply:
• Transformer: 230V AC (+10% -13%)
• SMPSU 100V-263V AC
  (optional where power-factor-correction is required)
• Supply frequency: 50/60Hz

Power consumption (typical)

Car Park Sign
Control electronics (Gemini): 8W
Display (per character module)
• 100/160mm Amber: 1.25W per character
• 240mm Amber: 5W per character
Heater: Typically 250W dependent upon enclosure size

Traffic Information Sign
Control electronics (Gemini): 8W
Display (per character module)
• 100/160mm Amber: 1.25W per character
• 240mm Amber: 5W per character
• 320mm Amber: 7W per character
Lanterns (Amber LED): 16.7W
Heaters: Up to 500W dependent upon enclosure size

Display options for car park or traffic information variants
• Character sizes: 100, 160, 240mm and 320mm
• LED colour: Amber
• Character information: 3, 6, 9, 12, 15 or 18 character line lengths
• Rows: Up to six (6), max. 90 characters

Environmental
• Approved to EN12966, EN50293
• Temperature range: -15°C to +60°C
• Humidity: 0 to 100% condensing
• Protection: IP55

Communications
• Ethernet, Fibre, GPRS/3G, ADSL and Wireless network options available
• UTMC compliant communications
• Siemens UVMS communications

Additional Information
• LED open / short circuit monitoring
• Remote fault diagnosis and software updating

All hardware and software names used are brand names and/or trademarks of their respective holders.
© Siemens 2013.
Right of modifications reserved.
Printed in the UK