

# Supernode II CANBUS Controller

## USER PROGRAMMABLE, 48 WAY I/O, DATALOGGER & TASK MANAGER



Automotive applications  
Type approved: e marked

Improve reliability with ruggedized switching and control for everything on your vehicle. The Supernode is all you need to implement intelligent control features on your vehicle, improving its safety, increasing operator ease of use, and will bring down component count and so the cost of build and the cost of ownership. When used with CANbus touch-screens or CANbus switch panels these benefits are multiplied.

The user programmable Supernode has the four functions of inputs, outputs, datalogging and system control built into one single unit. This makes it very suitable for applications where a centralized vehicle control is preferred, or as the main node where a distributed system is better.

The system is fully field proven with thousands of installations worldwide. It is suitable for ambulance, police, fire, cash in transit, outside broadcast, libraries, recovery, trailers, traffic management .... in fact any vehicle where inter-locking is beneficial, relay control is insufficient, datalogging is necessary or wiring burdensome.

## KEY FEATURES

- 12V or 24V installation
- IP67 packaging
- 180A total output
- 18 solid state 13A outputs
- 6 solid state 2A outputs
- 24 digital inputs
- “bulb failure” detection for LEDs or traditional filament type lamps
- Digital circuit breakers
- Circuit power indicator LEDs
- PWM/Flash/Delay control
- Interlocked outputs
- Integral data logger
- Windows programmable
- SAE J1939 CAN interface
- Additional CANbus switch modules optimise installation
- Local support from Antares

# Programmable

The functionality of the SUPERNODE II is created using an intuitive windows © based program. Once created, the functionality is uploaded at the press of a button. This means that the nodes for different vehicles can be kept in stock for support and easily configured for the vehicle. It also means that the vehicle can be easily upgraded during its life—ideal for fast moving areas such as the emergency services.



FM 37786  
ISO 9001:2008

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**ANTARES**  
engineering with answers

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Once trained by Antares you will be able to use the built-in a variety of features from simple switching and flashing of lights, through to nested safety interlocks. On-going support is provided by our engineers who can also programme the complete system if requested.

## Data logging

The system logs any selected activity (event) on the Supernode, fully time-stamped, with a reporting facility. This will allow the fleet operator to know when the vehicle is driven, when it is recharged, when the emergency lights are on .. The list is endless.

## Wiring and Looming

This is simplicity itself. All output wires are routed directly from the SUPERNODE II to the loads. A 3-wire input comes from all the CANbus panels or discrete switches can be directly terminated. Dual input power is supplied by two feeds.

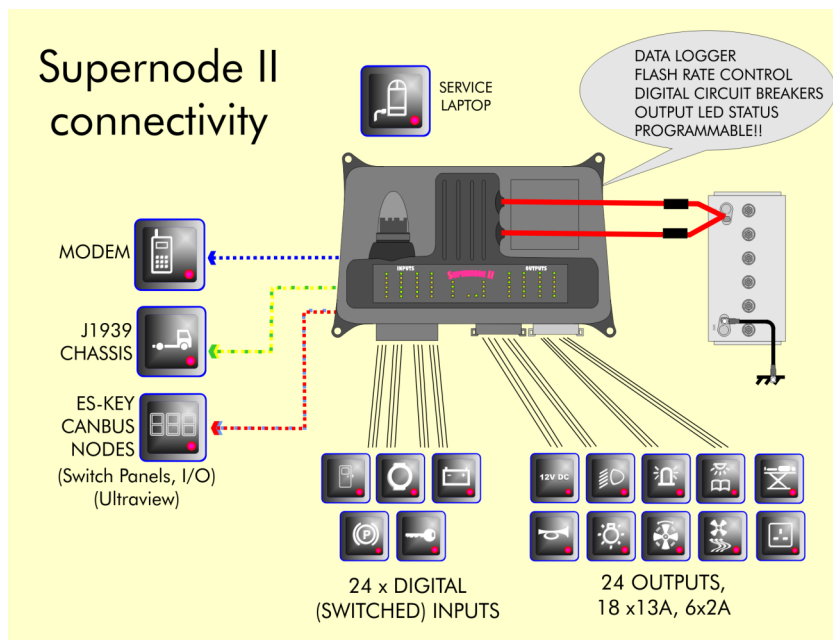
The SUPERNODE II is a simple but highly featured module which brings unparalleled functionality to your vehicle ... you can now avoid relays, crimp connections and experience the full benefits of a modern solid state programmable electrical system.

## Extras

**Extra Power**— I/O nodes or additional Supernodes or can be linked to provide any I/O combination required.

**Extra Switches**—Use CANBus switch panels which come in 2, 4,12 and16 switch arrays. Where necessary discrete inputs can also be hard-wired directly to the inputs.

**Extra Visualisation and control**— the supernode can be connected to the Eskey Ultraview... the ultimate in ruggedised touch screen technology.



TECHNICAL DETAILS		
	SUPERNODE II	SUPERNODE II, inc MODEM
Part number	85119890	851198901
Voltage range	+9VDC....+32VDC	
Power consumption	500mA@13.8VDC, 350mA@ 27.6VDC	
Power output (max 180A total)	18@13A positive, 6@2A negative	
Digital inputs	8 positive polarity, 16 negative polarity	
CANbus switched inputs	96 (from CANbus J1939 connected switch panels)	
Temperature range	-40°C ... +85°C	
Protection	IP67 , Sealed, Die-cast aluminium enclosure	
CAN specification	SAE J1939 proprietary, 250kbits/second	
LEDs	25 green LEDs for circuit indication & diagnostics	
Protection	Internal thermal fuse (2.5A input) Reverse voltage protection CANBUS protected to 24V ESD voltage, transient voltage, and load dump to SAE J1113 Outputs protected for short circuit and overload	
Dimensions	280mm (L) 190mm(W) x 65mm (H)	
Weight	2.0kg	
Connections and looms	Available to order as part of the Supernode II solution	
Software license	Es_Key Pro software operating under MS Windows (Note:only required by installer to programme units)	