

# Pillars, Power Supply & Isolation

## SIS Quad



### Applications:

#### Traffic Signals

The SIS Quad (Sense) enables traffic signal designers to comply with EN12767: 2007 by providing full electrical isolation of a traffic signal pole under impact. Each Signal pole is fitted with a small SIS impact sensor. In the event of an impact the sensor provides an output to the SIS Quad monitor board, which in turn activates complete LV and ELV isolation within 0.4 seconds.

The SIS Quad also offers significant Traffic Signal maintenance benefits. It enables complete isolation of individual signal poles, allowing maintenance works to be undertaken, whilst the remainder of the traffic signals site is left operational. This complies with CDM regulations, with regard to “future maintenance.”

As the SIS system offers electrical isolation for impact and maintenance it is therefore ideally suited for both passive and non passive safe traffic signals.

### Advantages

- ◇ Fully compliant with EN12767:2007
- ◇ Suitable for use with NE, LE and HE Passively safe columns
- ◇ Above ground system designed and built to your specification
- ◇ Guaranteed electrical isolation of all volts within 0.2 seconds of impact
- ◇ Guaranteed isolation even if the structure has not detached from its base
- ◇ Provides isolation of individual structures or circuits
- ◇ Provides fault outputs for impact, voltage drop and maintenance issues
- ◇ Fault outputs can be connected to CMS or RMS systems
- ◇ Simple to test at commissioning stage and for periodic maintenance



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# SIS Quad Specification

## SIS Quad (Sense) operation

The system, housed within the controller or local MEC cabinet is installed between the signal controller cabling and the street cabling so that all cable cores are connected through SIS isolators. An impact sensor is fitted to each signal pole, when the impact sensor is triggered the monitor unit channel will be activated and all isolators connected to the channel switched off. All SIS equipment has been CE and environmentally tested in accordance with TR2130.

## Monitor units (sense)

Four channel units to fit standard 3U 19" rack.

Positive indication by LED of activation due to impact or SENSE system.

Complete electrical isolation of a whole signal pole including impact sensor.

Provides clean contact outputs for impact or SENSE fault (F1), system failure (F2) and failure (F1 and F2).

Units are fitted with dual processors to improve reliability and improve operation.

The SENSE facility will detect a single isolator tripping and isolate the whole pole for safety.

Each channel can operate up to 8 isolators (32 cable cores).

## PSU (SENSE)

Dedicated supply unit for the QUAD (SENSE) system.

Multiple 17v AC supplies available.

Each PSU can power up to eight monitor units (32 poles).

## Sensor

Inertia device operating at 10 to 16G.

An IP64 rated mechanical device which draws no power.

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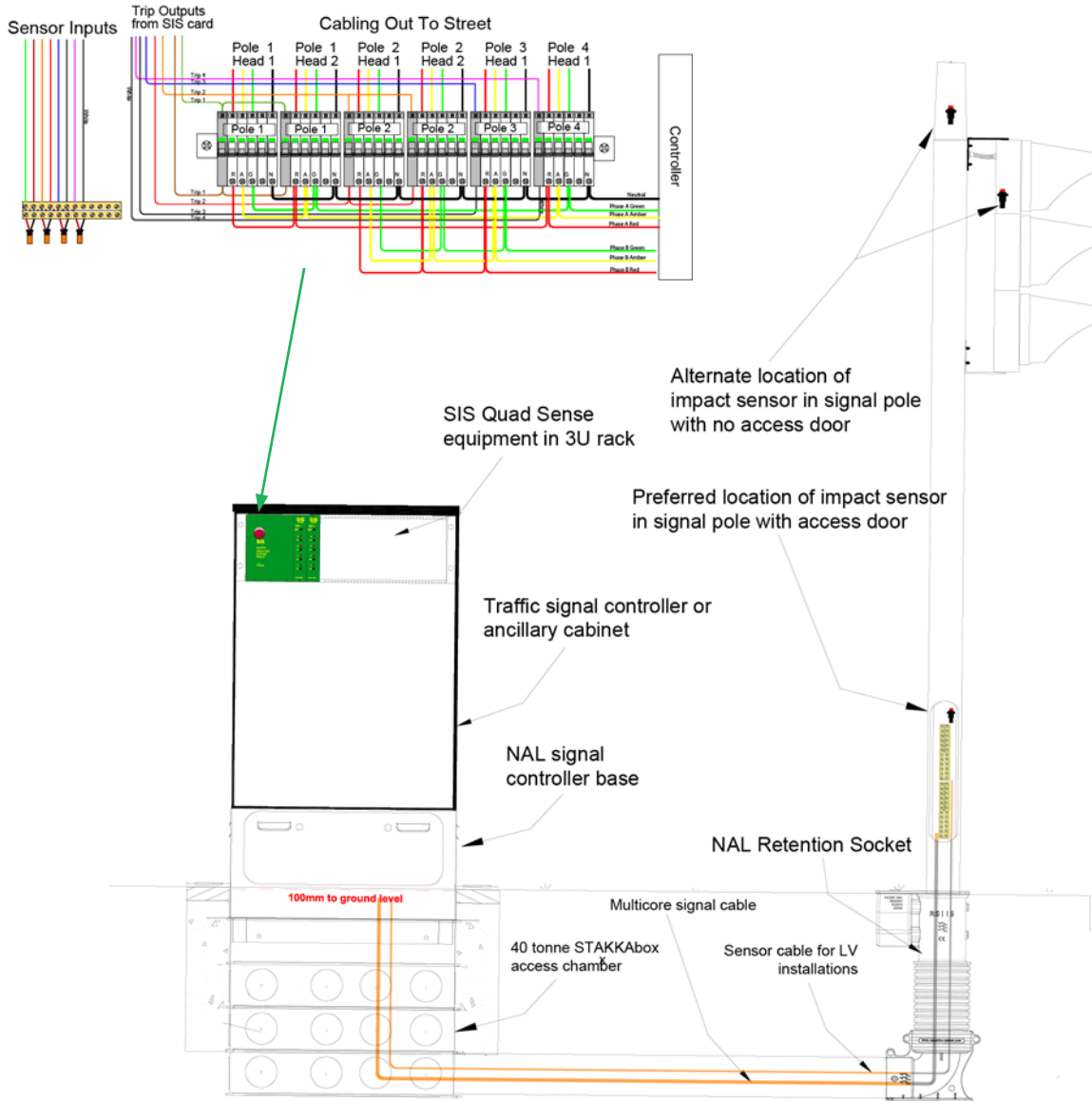


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# SIS Quad Wiring Layout



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