

# HEIMDALL

# TRAFFIC DETECTOR FAMILY



# **ON-CROSSING**

Designed to be used in pairs, this CW Doppler solution provides reliable detection of pedestrians when crossing at Puffin and similar type crossings. The use of on-crossing detectors enables the pedestrian green 'invitation to cross' period to be kept to a minimum whilst ensuring conflicting vehicle green signals are delayed until the pedestrians have safely crossed the road, significantly enhancing the efficiency of the crossing compared to older fixed crossing period solutions..

# **KERBSIDE**

Using an advanced 'dual antenna' design the Heimdall kerbside detector provides dependable sensing of pedestrians waiting to cross at Puffin and similar crossing types. The unique use of two integrated antennas allows the detector to provide excellent performance at a wide range of crossings without the need to use complex and expensive set-up software.

By using advanced radar for this application the problems inherent in other solutions, which rely on video techniques, are eliminated and Heimdall kerbside units will operated as well in the dark as in fully lit conditions and are completely immune to the effects of shadows.



#### **TERMINAL ACCESS**

Although most set-up and simple diagnostic tasks can be undertaken without the need to use a PC, access to advanced settings and performance data is provided via a simple handset interface.

Identical in operation to similar facilities provided on Siemens controllers and many other Siemens products, this interface can be accessed at the detector via a PC, using widely available terminal software, without the need to purchase propriety software tools.

#### Bluetooth

Where terminal access is required for configuration and maintenance purposes at ground level, all Heimdall detectors can be fitted with a Siecom Bluetooth option.

PCs utilising Siemens' Siecom software, offer highly secure wireless communication with these detectors, and the Siecom features allow the configuration of many detectors within a region to be easily managed.

## · Additional outputs

Typically, each Heimdall detector offers a single isolated 'solid state' output to indicate target detection. An additional output may also be specified to provide further detector output data or a dedicated detector fault output as required.

#### Serial data

For advanced applications, Heimdall detectors can be equipped with a serial communications facility to enable the detector status, configuration parameters and vehicle data – such as speed and occupancy to be accessed remotely.

Utilising industry standard RS485 two-wire serial communications, a number of detectors can be attached to a common pair of lines which can be interrogated on an individual basis via Siemens' widely used SiTos communication protocol.

#### **TECHNICAL SPECIFICATION**

#### Approval

UK Highways Agency specifications: TR2505

EMC: EN50293

Radio approval: EN 300 440

#### Supply voltage

24V AC ± 20% (48 to 63 Hz), or 24 V DC ± 20%

#### Power supply

143mA (AC)

113mA (DC)

186mA (AC) - with wireless or serial data options 147mA (DC) - with wireless or serial data options

#### Operating frequencies

24.05 GHz a 24.25 GHz

13.4 GHz a 14.0 GHz (kerbside and On-crossing)

#### Dimensions

150mm (h) x 135mm (w) x 90mm (d) (to the bottom of mounting bracket)

#### Weight

Less than 1.6 kg

#### · Standard connection

Defined Bulgin Buccaneer connector





## **ON-CROSSING**

- Operating range: Up to 12m.
- Crossing width: Typically up to at least 4m.
- Pedestrian minimum threshold speed < 0.5m/s
- Detector location: Either side of crossing no special adjustment needed to avoid interference between units.
- Detector mounting height: Various heights (above the ground) can be accommodated from 3.0m to 4.5m

## **KERBSIDE**

- Operating range: Wait areas up to 4.5m wide (DIP switch setting for short and long wait areas)
- Wait area width typically 1.0m (typical 2.0m adjacent to pedestrian demand unit)
- Fully static detection of pedestrians
- Detector location: On pole with associated Pedestrian demand unit.
- Detector mounting height: Various heights (above the ground) can be accommodated from 3.3m to 4.0m





