INFRA X20SR Speed Radar

The INFRA system is used to monitor construction activities, rock blasting, train traffic, road traffic, vibration in buildings etc.

The INFRA X20SR Speed radar offers a convenient way to measure speed on moving objects. Together with other parts of the INFRA system, it allows for monitoring correlation between the speed of a passing object and resulting environmental parameters such as noise and vibration.

The technology behind the INFRA X20SR is a licence free 24 GHz doppler radar, combining low power consumption and high sensitivity. Detection range is about 50 meters for a moving person and 140 meters for a vehicle, depending on conditions like heavy rain, fog or snow.

The sensitivity of the INFRA X20SR is a lobe towards the front of the device. It is essential to compensate for the angle between the device and the velocity of the target, as described in the manual. For easy adjustment of the direction towards the target the INFRA X20SR is equipped with a ball joint.

Directional sensitivity diagram
Technical Data

TEMPERATURE RANGE
-20 to +50° C (-4-122° F)

MEASURING RANGE
Measuring range is 250 km/h with 2 km/h resolution.

SENSOR ELEMENT
The sensor element is a high performance 24 GHz doppler radar module.

MECHANICAL
Watertight anodized aluminium with rubber seals.
Dimension: 110 x 105 x 59 mm (4.3 x 4.1 x 2.3 in)
Protection class IP67
Weight: 890 g (2,0 lbs)

CALIBRATION
Only the speed radar has to be calibrated. The rest of the system is data communication and data storage. The Speed Radar has an internal memory for identity, calibration factors, calibration date etc.

CE APPROVAL
EMC: 2014/30/EU
LVD: 2014/35/EU
RoHS: 2011/65/EU (2015/863)