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## Product Reference Sheet

### Localisation-Transceiver TRX-1630

This product is subject to special sales and delivery conditions. Please contact your Kapsch Sales representative.

DSRC Transceiver with precise localisation capability for tolling applications according to CEN TC278 standards.



<b>Topology</b>	<b>IBB slaves star</b>
<b>Version</b>	TRX-1630-B/S 34025100600
<b>Fixing</b>	Universal

**Mechanical characteristics**

Dimensions [LxWxD]	420mm x 200mm x 86mm
Weight	~ 6.25 kg
Material of housing	Aluminium alloy die casting
Radom	Polycarbonate

**Electrical characteristics and conditions**

Power supply input	
Rated input voltage	Nominal 24V DC or 48V DC
Input voltage range	Min: 21.6V DC (=24V – 10%) permanent Max: 52.8V DC (=48V + 10%) permanent
Protection	The Transceiver is internal protected against reverse polarity of the input voltage and internal fused with 3A / slow blowing.
Power consumption TRX-1X30	12,0W typically operating mode 9,6W standby mode

IBB interface	
Signals	IBB_TX+/-, IBB_RX+/-
Type of interface	4 wire balanced - RS422
Source voltage	RS422 Level ( $\pm 5V_{p-p}$ maximum)
Maximum cable length	140m

Ethernet	
Signals	Isolated TX+/-, RX+/-
Type of interface	4 wire balanced, isolated
Maximum cable length	80m

**RF / DSRC conditions & characteristics**

Frequency range	5.7925GHz - 5.8175GHz
DSRC downlink-channels	Channel 1: 5.7975GHz Channel 2: 5.8025GHz Channel 3: 5.8075GHz Channel 4: 5.8125GHz

<b>Mounting position</b>		
	Antenna Polarization	Left hand circular
	Radiated power	max. 33dBm EIRP
	Data rate downlink	Medium Data Rate 500kbit/s
	Data rate uplink	Medium Data Rate 250kbit/s

<b>Environmental conditions</b>	Temperature (operation)	-40°C ...+55°C
	Temperature (storage)	-40°C ...+70°C
	Relative humidity	100%
	IEC protection rating TRX 1630-B	IP67, ref. EN60529-A1 (IEC 60529)
	Vibration	5Hz – 200Hz, 0,02g <sup>2</sup> /Hz, broadband random
	Shock	150m/s <sup>2</sup> / 11ms
	Salt mist	HCL 0.1 – 0.5mg/m <sup>3</sup> , level 4
	Wind load (incl. optional sun cover)	70 km/h (43.5 mph) – 34.5 N 120 km/h (74,6 mph) – 100 N 140 km/h (87.0 mph) – 138 N 160 km/h (99.4 mph) – 180 N
	Altitude (operational)	-100 .. +3,000m (1026hPa .. 700hPa air pressure)

\*) specified for channels 1 – 4,

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<b>Compliances</b>	ETSI TG37	Test standards
	EN300674-1, EN300674-2-1, CEPT/ERC 74-01 CEPT 70-03 EN301489-3	Radio Interface DSRC EMC for RTTT spurious emissions SRD
	EN301489-1, EN301489-3	EMC
	EN61000-4-3	Immunity

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EN61000-4-6	Emission
EN60529-A1	protection class
EN60950-1 EN60950-22	Product safety, LVD, (General conditions) (for outdoor equipment)
RoHS2 conformity	Yes
DSRC	All applicable CEN 5.8 DSRC TC278 standards

## Dimensions of Transceiver

Figure 1  
Dimensions of  
TRX-1630-B/S  
with mounting plate

