

Ogier Electronics Mobile-T Vehicle

The equipment is the high power version of the digital Mobile-T (the Mobile-T-HP). It provides broadcast quality video in line of sight and non line of sight conditions. Like the lower power version it can be configured for a number of different applications. Here, the transmitter is configured as a vehicle equipment and the receiver is configured for a static ground based configuration. The specifications below apply to the 1.4 GHz band, but other frequencies can be used.

Video Channels	1 in one direction	
Frequency	Centre frequency	Selectable between 1,000 and 2,800 MHz
	Bandwidth	8 MHz per channel
Range	Line of Sight	30 km
	Non Line of Sight	3 km, up to 5 km
	Availability	99.95% all weathers
Transmitter	Power	30 dBm (1 Watt)
	EIRP	Up to 36 dBm (4 Watts)
	Modulation	OFDM with 2,000 QPSK modulated carriers
	Polarisation	Linear
	Frequency stability	30 ppm
Receiver	Space diversity	Automatic antenna selection
	Sensitivity	-90 dBm
	Bandwidth	8 MHz
Transmit Antenna	Type	Dipole
	Beamwidth	360 degrees azimuth, 20/10 degrees elevation
	Antenna Gain	2 dB or 6 dB
Receive Antenna	Type	2 planar sector antennas
	Beamwidth	Each antenna, 90 deg azimuth, 60 deg elev
	Gain	12 dB
Video	Quality	DVB-T Digital Video Broadcast – Terrestrial
	Input / Output	25 Hz frame rate PAL or NTSC 1Volt 75 ohm
	Bandwidth	5.6 MHz
	Compression	MPEG2
Controls	Transmitter	On / Off
	Receiver	On / Off
Connectors	Transmit Antenna	N Type
	Transmitter	N Type to Transmit Antenna BNC for video Audio and Data (option) 2 pole for DC power
	Receive Antenna	N Type to Receiver
	Receiver	2 N Types to Receive Antennas BNC for video Audio and Data (option) 2 pole for AC mains power
Prime Power	Transmitter Voltage	9 to 18 Volts DC from the vehicle battery via a stabilised supply which we assume is fitted
	Transmitter Current	4 Amps at 15 Volts DC
	Receiver Voltage	200 to 240 Volts AC
	Receiver Power	25 Watts
Sealing	Transmitter	IP20
	Receiver	IP20
	Antennas	IP66
Dimensions	Transmit Antenna	300 x 20 mm
	Transmitter	(2U) 483 x 310 x 87 mm
	Receive Antenna	2 units each 155 x 125 x 35 mm
	Receiver	(1U) 483 x 250 x 44 mm
Mass	Transmit Antenna	0.2 kg
	Transmitter	7.2 kg
	Receive Antenna	1.0 kg each
	Receiver	6.0 kg
Temperature Range	-20 to +50 C	
Life	15 Years	
Radiation Hazard	None	0.004 mW/square cm 3 m from antenna
Routine maintenance	None required	