

TEL2 Race Car Telemetry System



System includes
10 watt car transmitter
with AV mount and fan.
car antenna.
car power filter and loom.
car data lead.

Pit data receiver.
12 volt power supply.
RS232 data to pc lead.
High gain receiver antenna.
20 metre low loss antenna
cable.



Features

- Full 70Mhz switching bandwidth**
- 10 watt continuous output**
- User programmable**
- RS232 data at 19200 Kbs**
- Car unit has AV mount & fan cooling**

Full 70 Mhz tuning bandwidth

Technical Specification

TRANSCEIVER

Frequency Range	403...473 MHz
Tuning Range	70 MHz
Channel Spacing	12.5 kHz / 20 / 25 kHz (SW selectable)
Frequency Error Tolerance	< 1 kHz
Type of Emission	F1D
Communication Mode	Half-Duplex
TRANSMITTER	
Carrier Power	10, 20, 25 or 35 W / 50 ohm
Carrier Power Stability	(+ 2 dB / - 3 dB)
TX Duty Cycle *	100 % (22 °C / 35 °C) 40 %
10 W	no limit / 50 min no limit
RECEIVER	
Sensitivity	< -114 dBm (BER < 10 E-3) **
Co-channel Rejection	> -12 dB
Adjacent Channel Selectivity	> 47 dB @ 12.5 kHz / > 52 dB @ 25 kHz
Intermodulation Attenuation	> 60 dB
Spurious Radiation	< 2 nW
DATA MODEM	
Interface	RS-232
Interface Connector	Waterproof IP67 8-pin LEMO HGA. 1B. 308. CLPP
Data Speed of RS Interface	300 – 38400 bps
Data Speed of Radio Interface	19200 bps (25 kHz)
	9600 bps (12.5 / 20 kHz)
Data Format	Asynchronous RS-232
GENERAL	
Operating Voltage ***	+9 ... +16 Vdc
Operating voltage feeding	4-pin ODU MINI-Snap Size 1
Power Consumption (average)	1.8 W typical (Receive)
	110 W typical (Transmit)
IP class	IP67 (NEMA 6)
Temperature Range - Operating	-25 °C ... +55 °C -40 °C ... +75 °C (absolute min /max)
Weight car unit	1210 gms
Size car unit	165 x 135 x 65 including AV mount
Antenna Connector	TNC, 50 ohm, female