

## Ogier Electronics Multichannel ML3100 Links

The Multichannel ML3100 can transmit up to 19 video channels together with data or audio. The designators 30 or 60 indicate the antenna size in cm and HP indicates those equipment with high power transmitters to increase the range

Regulatory compliance	ETSI EN 300 632 and MPT 1425	
Number of video channels	Up to 19 in one direction	
Number of data or audio channels	1 in both directions as standard. Others can be added as options	
Frequency band	31.0 to 31.8 GHz	
Frequency stability	Phase locked to 30 ppm	
Range - all weathers	ML3100-30	2.5 km
	ML3100-HP-30	5 km
	ML3100-HP-60	10 km
Availability	99.95% (UK conditions)	
Antenna type (both ends)	Low sidelobe high performance Parabola	
Antenna size (both ends)	ML3100-30	30 cm diameter
	ML3100-HP-30	30 cm diameter
	ML3100-HP-60	60 cm diameter
Antenna gain (both ends)	ML3100-30	36 dBi
	ML3100-HP-30	36 dBi
	ML3100-HP-60	42 dBi
Transmit power	0 to +15 dBm shared between the channels	
Transmit EIRP	ML3100-30	36 dBm typical
	ML3100-HP-30	51 dBm typical
	ML3100-HP-60	57 dBm typical
Polarisation	Up to 10 chs	Vertical or horizontal
	Up to 19 chs	Vertical and horizontal
Receiver Noise Figure	6 dB	
Carrier to Noise	18 dB	
Signal to Noise	50 dB	
Carrier to Interference	30 dB	
Modulation	Wideband FM, 10.5 MHz deviation	
Pre-emphasis	Compliant with CCIR Rec 405-1	
Tuner bandwidth	27 MHz	
Video inputs/outputs	PAL or NTSC 5.6 MHz 1Volt 75 ohm	
Video Quality	6% Differential Gain	
	6 Deg Differential Phase	
	6% Bar Amplitude Error	
	6% C/L Gain Inequality	
	6% C/L Intermodulation	
	75 nS C/L Delay	
	6% Bar Tilt	
	2% 2T K	
	6% 2T P/B	
Data inputs/outputs	Either, RS 485, 422 or 232 at 19.2 kbps Simplex, half duplex or full duplex. Other options available	
Audio option (instead of data)	0 dBm in 600 Ohms balanced or unbalanced	
Audio frequency response	50 to 10,000 Hz +/-3dB	
Audio Signal to Noise	50 dB	
Audio harmonic distortion	5% at 1 kHz and 0 dBm	
Input voltage	100 - 250 Volts AC, 50 - 60 Hz	
Input power	30 Watts each end	
Temperature Range	-20 to +60 C	
Wind	Up to 200 kph	
Equipment	Up to 10 chs	Transmit Transceiver and Modulator at video transmit end. Receive Transceiver and Demodulator at video receive end
	Up to 19 chs	Duplication of 10 channel build
Dimensions	ML3100-30 Transceiver	30 cm dia x 41 cm
	ML3100-HP-30 Transceiver	30 cm dia x 41 cm
	ML3100-HP-60 Transceiver	66 cm dia x 80 cm
	Modulator/Demodulator	50 x 40 x 22 cm
Connections	Power and Data/Audio	Terminal connectors in Modulator and Demodulator Units
	Video	BNC connectors in Modulator and Demodulator Units
	2 CT100 cables from each Modulator or Demodulator to its corresponding Transceiver	
Life	15 Years	
Routine maintenance	None required	
Weight	ML3100-30 Transceiver	15.5 kg
	ML3100-HP-30 Transceiver	16 kg
	mL3100-HP-60 Transceiver	42 kg
	Modulator/Demodulator	Up to 25 kg
Mounting	Transceivers	75 to 110 mm dia vertical pole
	Modulator/Demodulator	Wall
RF Hazard	None (< 0.05 mW/sqcm average at antenna)	