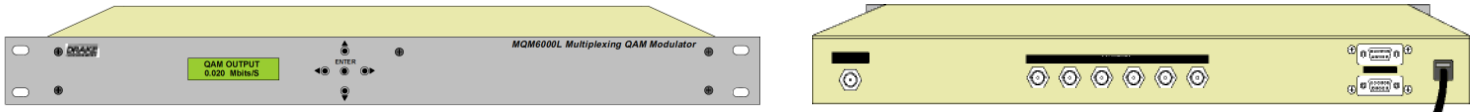


## MQM6000L Multiplexing QAM Modulator



### GENERAL DESCRIPTION

THE R.L. DRAKE MODEL MQM6000L IS A PROFESSIONAL QUALITY, MULTIPLEXING QAM MODULATOR THAT RECEIVES UP TO SIX MULTIPROGRAM TRANSPORT STREAMS VIA SIX BNC, ASI INPUTS. WHEN SIX STREAMS ARE INPUT, THE MQM6000L THEN MULTIPLEXES ONE PROGRAM FROM EACH INPUT AND APPLIES THE RESULT TO THE QAM MODULATOR AND UP CONVERTER FOR OUTPUT.

A PROGRAM FILTER IS PROVIDED TO ALLOW SELECTION OF THE ONE DESIRED PROGRAM FROM EACH INPUT. OTHER PROGRAMS IN THE INCOMING STREAMS ARE DROPPED.

THE MQM6000L OFFERS A +40 dBMV OUTPUT UPCONVERTER WITH PHASE NOISE REDUCED TO A LEVEL THAT IS COMPATIBLE WITH QAM MODES UP THROUGH 1024QAM.

THE MQM6000L CAN BE USED WITH THE DRAKE DIGITAL HEADEND REMOTE CONTROL SOFTWARE, VERSION TO BE ANNOUNCED, FOR SETTING UP THE PROGRAM FILTERING, REMOTE CONTROLLING, OR REMOTE MONITORING OF OPERATING PARAMETERS. THIS PROGRAM CAN ALSO BE USED TO DOWNLOAD NEW FIRMWARE INTO THE UNIT IF THAT EVER BECOMES DESIRABLE.

### PROGRAM FILTERING

A 'SELECT PROGRAM' FUNCTION IS PROVIDED TO ALLOW THE OPERATOR TO SELECT WHICH MPEG PROGRAM PRESENT ON EACH OF THE SIX INPUT STREAMS IS TO BE INCLUDED IN THE OUTPUT MULTIPLEX.

### PSIP OPTIONS

THE MQM6000L CAN BE SET TO PROCESS PSIP INFORMATION FROM ALL SIX SOURCES AND REWRITE TABLES CONTAINING COMBINED PSIP INFORMATION, OR IN CASES WHERE THE OFF-AIR BROADCAST CHANNELS MAY NOT BE TRANSMITTING SOME OR ALL OF THE TABLES, IT CAN BE SET TO IGNORE AND DISCARD THE PSIP TABLES COMPLETELY, OR IT CAN BE SET TO GENERATE MGT AND VCT TABLES WITHOUT EIT TABLES. NULL PACKET PROCESSING IS APPLIED AS NECESSARY TO KEEP THE OUTPUT DATA RATE AT THE DESIRED SETTING. PCR CORRECTION IS PERFORMED WHEN NECESSARY.

### OUTPUT

THE BUILT-IN AGILE UPCONVERTER PROVIDES +40 dBMV OUTPUT.

THE MQM6000L OPERATES IN A FIXED OUTPUT CLOCK MODE AND PROCESSES NULL PACKETS WHEN REQUIRED TO MAINTAIN THE SET FIXED CLOCK RATE. PCR CORRECTION IS INCLUDED.

## Drake Digital MQM6000L Technical Specifications

### ASI Inputs

Inputs:	<p><b>Six Input Programs</b> -270 MHz clock rate, 40 Mbps maximum TS rate at each input. MPTS or SPTS</p> <p><b>Multiplexing and Program Filter</b> – One SPTS may be selected from each input. The selected programs will be multiplexed as long as the data rate of the resulting MPTS does not exceed the output QAM channel capacity.</p>
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### QAM Modulator

Modulation Modes:	16QAM, 32QAM, 64QAM, 128QAM, 256QAM, 512QAM or 1024QAM. Refer to manual for available combinations of QAM modes and FECs.
Symbol Rate:	1 Ms/s to 7 Ms/s.
Forward Error Correction (FEC):	ITU-A (DVB) or ITU-B (DigiCipher® II).
I/Q Phase Error:	Less than 1 degree.
Carrier Suppression:	45 dB.
Channel Amplitude Error:	Less than 1dB.
MER:	Greater than 38 dB with blind equalizer.

**Null Packet Processing** Fixed output clock mode.

### Upconverter RF Output

Output Frequency Range:	54 MHz to 1002 MHz.
Channel Plan:	Standard CATV, HRC, IRC or Broadcast.
FCC offsets	Automatic, +12.5 or +25 KHz
Frequency Stability:	±5 ppm.
Maximum Output Level:	+40 dBmV minimum, adjustable downward.
Output Level Accuracy:	±1 dB.
Output Impedance:	75 Ohms with return loss better than 14 dB (within output filter passband).
Spurious Outputs:	-60 dBc from 40 MHz to 1000 MHz.
Broadband Noise:	-75 dBc
Phase Noise:	-101 dBc @ 10 kHz offset.

### RS232 Control

Data Link:	2400, 4800, 9600, or 19,200 baud interface via serial cable.
RS232 Input:	DB9 connector for connection to modem or PC
RS232 Output:	DB9 connector for connection to additional units.

### General

Power:	90-132 VAC, 60 Hz, 15 W maximum
Weight:	7 lbs. (3.2 Kg.)
Size:	19" (48.3 cm) W x 1.75" (4.45 cm) H x 11.5" (29.2 cm) D
Operating Temperature:	0° C (32° F) to 50° C (122° F)

Specifications, price, and availability are subject to change without notice or obligation.



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