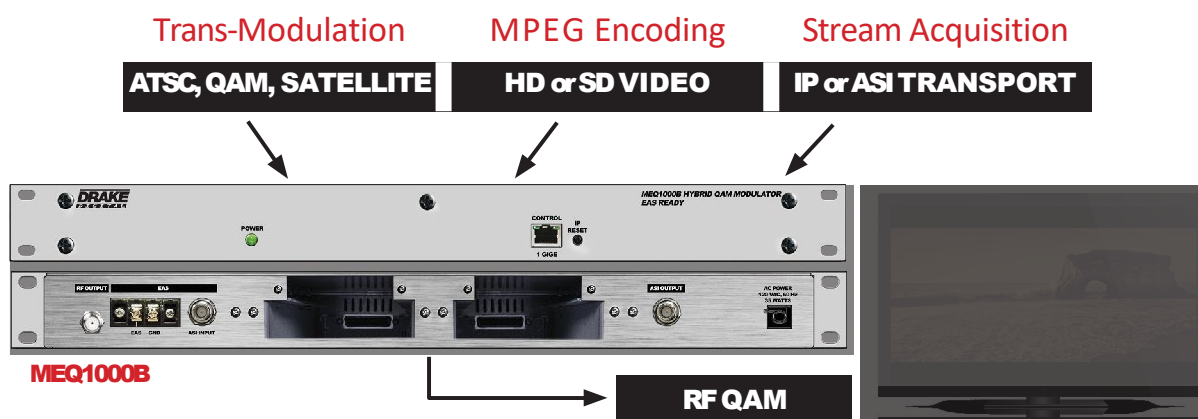


# MEQ1000B - Multiplexing Hybrid QAM Modulator

## Multi-Solution Edge QAM Platform

The **MEQ1000B** is the industry's first commercial-grade, multiplexing Hybrid QAM modulator. Ideal for applications where a single QAM output is required from each Hybrid QAM chassis, the MEQ1000B features a variety of plug-in input modules including an ATSC/QAM input tuner, a QPSK/8PSK input tuner, an ASI input, an IP input, as well as a full selection of digital SD and HD encoder modules, bringing an unprecedented level of flexibility to cable operators.

The MEQ1000B has bays for up to two input modules. The video content from both modules enters the main chassis where it is MPEG program-filtered, multiplexed, and groomed. Any number of program streams may be sent to the QAM modulator for Output and/or be exported via the MEQ1000B's ASI Output.



## Features

- High level +61 dBmV, low noise multiplexed RF QAM output
- RF output range from 54 to 1,002 MHz
- Simultaneous ASI output of the QAM multi-program transport stream
- Program filtering & multiplexing from 2 transport streams
- EAS compatible with SCTE-18 force tune tables
- Generates custom VCT (Virtual Channel Tables)
- Field-upgradable firmware



## Program Acquisition Module Options

- DTD1000A: Digital Tuner and Demodulator Module
- SDM1000: Satellite Tuner and Demodulator Module
- IPI1000: IP Program Acquisition Module
- ASII: ASI Input Module

## MPEG Encoder Module Options

- SDE24A: SD Dual Video Encoder Module
- HDE24A: HD Video Encoder Module
- SDI24A: SD or HD SDI Video Encoder Module

Model	Item #	Description
MEQ1000B	1002511B	Multiplexing Hybrid QAM Modulator Platform
DTD1000A	1002512A	Digital Tuner and Demodulator Module - ATSC/QAM
SDM1000	1002576	Satellite Tuner and Demodulator Module - QPSK/8PSK
IPI1000	1002608	IP Input Module – GigE
ASII	1002397	ASI Input Module with loop thru
SDE24A	1002514A	SD Dual Video Encoder Module
HDE24A	1002515A	HD Video Encoder Module
SDI24A	1002516A	SDI Video Encoder Module

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# TECHNICAL DATA & SPECIFICATIONS

DRAKE MEQ1000B MULTIPLEXING HYBRID QAM MODULATOR - 1002511B



## QAM MODULATOR

Modulation Modes:	Standby, CW, 16, 32, 64, 128, 256, 512, 1024 QAM
Symbol Rate:	1 Ms/s to 7 Ms/s
FEC:	ITUA (DVB) or ITUB (Digicipher)
I/Q Phase Error:	< 1 degree
Carrier Rejection:	> 40 dB
Channel Amplitude Error:	< 1 dB
MER:	> 40 dB

## RF UPCONVERTER OUTPUT

Frequency Coverage:	54 - 1002 MHz
Channel Plan:	Standard CATV, HRC, IRC or Broadcast
Frequency Stability:	± 5 ppm
Maximum Output Power:	± 61 dBmV (± 2 dB)
Spurious:	> -60 dBc
Broadband Noise Floor:	-80 dBc in a 6 MHz bandwidth
Phase Noise:	-95 dBc @ 10 kHz offset
Frequency Resolution:	1 Hz
Return Loss:	> -12 dB
Attenuation Range:	15.5 dB
Adjacent Channel:	Meets DOCSIS spectral mask
Sideband Rejection:	> 40 dB

## ETHERNET CONTROL INTERFACE

Interface:	1x Front Panel RJ45 GigE
User Access:	GUI-based menu via any standard web browser. (Recommended: Chrome or Firefox)
Network Access:	User specified IP Address for local access. User specified Gateway IP address for remote access
SNMP:	User specified Target IP / Port for SNMP traps

## ASI OUTPUT

The ASI Output provides a copy of the transport stream that is input to the QAM modulator.

## PHYSICAL SPECIFICATIONS

Temperature Rating:	0 to + 50 degree C, ambient
Dimensions:	14.25"D x 3.5"H x 19" W
Weight:	8 lbs.
Power Requirements:	100-120 VAC/60 Hz

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

## Applications

Hospitality, Health Care, Commercial, Government/Military, Digital Signage, Cable Networks