



DM2000A

DVB/SCPC Satellite Modulator
data sheet and technical specifications

important features:

Fully compliant with DVB standards

ASI, M2P, LVDS, and Serial Inputs

QPSK/DVB, BPSK or
QPSK modulation for SCPC

Variable data rates
64 Ms/s to 20 Ms/s

Frequency agile from 50 to 180 MHz
in 1 kHz increments

Compatible with current FlexRoute,
MPEG Pro and DataNet networks

Front panel LCD display
and keypad

Programmable carrier and
operational parameters

The SuperFlex DM2000A modulator is a combined QPSK DVB modulator and BPSK/QPSK SCPC modulator. It is fully compliant with internationally accepted DVB standards.

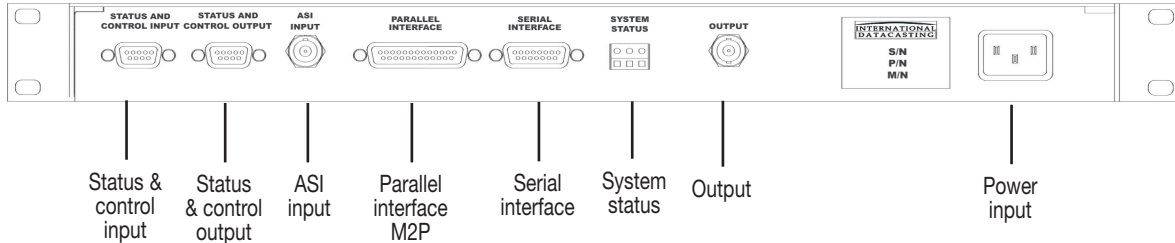
The unit's wide range of data rate agility, from kilobits to megabits, permits network operators to easily reconfigure their network data speeds for their rapidly expanding needs.

In addition to displaying the unit's operating status, a front panel keypad and LCD display enables the user to program the numerous transmission parameters. Rear panel connectors optionally permit the external control of these parameters, as well as status monitoring.

The DM2000A provides the vast array of functions and the flexibility of operation to accommodate the constant reconfiguration and expanding nature of today's digital satellite networks.

Manufactured to ISO9002 quality systems standards, the DM2000A comes as a standard 43.2 cm rackmount form factor.





CARRIER PARAMETERS

- Modulation:** BPSK or QPSK (compatible with current modulators and DVB (QPSK only))
- Alpha Factor (Modulation):** 0.5
0.45
0.35 (DVB)
- FEC Type:** DVB concatenated, Viterbi Reed-Solomon
Viterbi 1/2, 2/3, 3/4, 5/6, 7/8
Reed-Solomon 204/188
- Bit Rate:** Bit rate agile from 64 Ms/s to 20 Ms/s
- Output Frequency:** 50 MHz to 180 MHz
- Tuning Steps:** 1 kHz
- Frequency Stability:** ±20 ppm over temp
- Output Level:** 0 to -30 dBm (adjustable in 0.1 dB steps)
- Spurious Output:** -55 dBc (maximum at 0 dBm)
- Output Impedance:** 75 ohm (optional 50 ohm)
- Output Connector:** BNC, female

DIGITAL PARAMETERS

- Data Scrambling:**
 1. DVB compliant scrambling for Energy Dispersal Randomization
 2. V.35 scrambling
 3. International Datacasting Proprietary (similar to CCITT V.35) compatible with DM250/DM260 series modulators

ASI Interface
DVB-ASI compliant interface

Serial Interface
Clock Source: Internal/external
Interface: RS-422 compatible with DM250/DM260 series modulators
Input Data Rates: 64 kb/s to 10 Mb/s in 1 kb/s steps

Parallel Interface
Clock Source: Internal/external
Interface: DVB compliant MPEG-2 transport streams, 8 Bit (1 Byte) parallel interface in accordance with M2P specification
Minimum Input Data Rate: 512 kb/s
Maximum Output Data Rate: 40 Mb/s

CONTROLS AND INDICATORS

- Front Panel Indicators:** Front panel LCD display and keypad allows access to programmable functions and status
- Rear Panel Controls/Connectors:**
 - Status & Control Connector:** Input DE-9S, female
Output DE-9P, female
 - Status & Control Interface:** Optional RS-232 Daisy chaining
 - System Status Connector:** Screw terminal connector (3 terminals)

POWER REQUIREMENTS

- Supply Voltage:** 90 to 250 VAC, 50 or 60 Hz
- Power Consumption:** 35 Watts, typical
- Cooling:** Convection

PHYSICAL

- Dimensions:** 4.4 cm H x 38 cm D x 43.2 cm W
- Weight:** Less than 2.96 kg
- Chassis:** Standard EIA rack (1 rack unit)

ENVIRONMENTAL CONSIDERATIONS

- Operating Temperature:** 0 °C to 50 °C
Storage Temperature: -20 °C to 70 °C
- Safety/Emissions:** IEC 950 Safety, Pending FCC, CE