# **MDM5010 Satellite Modem**





The Dialog modem series consist of two-way, high throughput DVB-S2X modems that meet any application across a broad array of markets. The modems share a wide range of key features and can be easily mixed in a single satellite network on the multi-service Dialog platform. The series is extremely flexible as it can leverage Dialog's three return waveform technologies: MF-TDMA, high-rate SCPC and Mx-DMA which seamlessly combines MF-TDMA flexibility with on-demand variable bandwidth allocation of SCPC while guaranteeing the highest efficiency and availability. This series also supports wideband operations up to 500 Msps in the forward channel, enabling service providers to set-up almost any type and size of network on any available type of satellite.

The MDM5010 Satellite modem is the very high throughput modem capable of handling traffic up to 500 Mbps. The MDM5010 Satellite Modem supports a wide range of IP services including internet/intranet access, Voice over IP (VoIP), backbones for mobile backhauling and trunking, fiber restoral/backup services, contribution and multicasting services. The high spectral efficiency, high packet and bit rate capability makes the MDM5010 ideal for the most demanding customers with very bandwidth-intensive services in the enterprise, backhauling, offshore and maritime markets. Service Providers can have a business model with maximum flexibility in supported applications, responsiveness to new market opportunities and Service Level Agreement (SLA) schemes that fit customers' needs.

The modem's ease of installation through multilingual web GUIs and Point&Play application allows services providers to deploy their services quickly, in a cost-effective way.

**Markets** 

**Enterprise** 

**SME** 

Trunking

Cellular Backhaul

Government / Defense

Broadcast

Offshore and Maritime

#### Main Features:

- •DVB-S2 (up to 64 Msps) / DVB-S2X (up to 500 Msps) outbound
- Supports a full range of DVB-S2X MODCODS up to 256APSK
- Return max rates up to 133 Msps (SCPC), 20 Msps (Mx-DMA)
- Security features with Optional AES128 scrambling
- OpenAMIP and GXT file support for mobility
- Embedded TCP acceleration, GTP acceleration and header compression

DIALOG

powered by-Newtec *idirect* 





### **Network Configuration**

Network Topology	RX	TX		
	DVB-S2/DVB-S2X	MF-TDMA	Mx-DMA	SCPC
Modulation	QPSK, 8PSK, 16APSK, 32APSK,	4CPM	QPSK, 8PSK,	QPSK, 8PSK,
	64APSK, 128 APSK, 256 APSK		16APSK, 32APSK	16APSK, 32APSK, 64APSK
Symbol Rates	1 Msps to 500 Msps	Up to 7.6 Msps	32 ksps to 20 Msps	1 Msps to 133 Msps

### **Modem Interfaces**

Tx Interface			
Connector	N-Type 50 Ohm		
Frequency range L-band	950-2400 MHz		
TX level	-55 dBm to +5 dBm		
BUC power supply	none		
BUC reference	10 MHz (BNC)		
Rx Interface			
Frequency	950-2150 MHz		
Connector	N-Type 50 Ohm*		
LNB pwr supply	13/18VDC, 500mA		
LNB LO selection	22 kHz on/off		
LNB reference	10 MHz		
Data Interface			
LAN: Eight 10/100/1000 Mbps Ethernet, auto MDI/MDIX			
Management Interface			
Four 10/100/1000 Mbps Eth	ernet, auto MDI/MDIX		
Future Use			
USB	USB 2.0		
MicroSD card	Mass storage option		

## Management

#### **Protocols Supported**

Terminal Authentication, UDP, IP, IPv6, ICMP, TCP, ARP, FTP, DHCP, IP forwarding, Diffserv, DNS, IGMPv1/2

#### **Multilingual Web GUI**

Manage web GUI via configurable management IP address

### **Mechanical and Environmental**

Housing		Height: 1RU, width: 19", depth 44.5 cm (17.52 in)
Weight		8.0 kg (17.637 lbs)
Temperatui	re:	
	Operating	0° to +50°C (32° to +122°F)
	Storage	-10° to +60°C (14° to +140°F)
Humidity:		
	Operating	5 - 95% non-condensing

### **Power Supply**

Input Voltage	AC, 50Hz\220-260 V, 60Hz\100-130 V
	36-76VDC or -48VDC (hardware option)

<sup>\*</sup>Optional external B type to F type lossless converters are orderable