

# MDM2010 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 return waveform technologies: MF-TDMA and Mx-DMA MRC 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 480 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 MDM2010 is a compact, lightweight desktop modem with very low power consumption. The MDM2010 is bundled with a range of different antenna sizes and interactive LNBS forming an affordable satellite terminal on the Dialog platform. Its ease of installation and high performance modulation techniques enable network operators to offer IP broadband services in a cost-effective way.

## Markets

Consumer  
SOHO  
SME  
Government  
Education  
Enterprise

## Main Features:

- DVB-S2 / DVB-S2X support up to 480 Msps in the forward link
- Supports DVB-S2X MODCODS up to 64APSK
- Support for both MF-TDMA and MxDMA with MRC (Multi-Resolution Coding) return technologies up to 10 Msps
- Throughput rates up to 100/10 Mbps
- Support for single cable and dual cable outdoor units
- Unique Point&Play easy-installation capability
- Easy to use multilingual web GUI for installation, diagnostics and troubleshooting

DIALOG





## Network Configuration

Network Topology	Rx		Tx	
	DVB-S2X	DVB-S2	Mx-DMA MRC (Multi-ResCoding)	MF-TDMA
<b>Modulation</b>	QPSK, 8PSK, 16APSK, 32APSK, 64APSK (Annex-M)	QPSK, 8PSK, 16APSK, 32APSK	QPSK, 8PSK, 16APSK, 32APSK, 64APSK	4CPM
<b>Symbol Rates</b>	3.6 Msps to 480 Msps	3.6 Msps to 64 Msps	Up to 10 Msps	Up to 3.8 Msps

## Modem Interfaces

### Tx Interface

Connector	F-Type 75 Ohm
Frequency	2750-3000 MHz
TX level	0 dBm

### Rx Interface

Connector	F-Type 75 Ohm
Frequency	950-2150 MHz
RX level	-65 to -25 dBm

### Data Interface

LAN: One 10/100/1000 Mbps Ethernet, auto MDI/MDIX  
 OPTIONAL WI-FI: 802.11 b/g/n, 2.4 GHz

### Future Use

MicroSD	mass storage option MicroSD cards
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## Management

### Protocols Supported

UDP, IPv4 & IPv6, ICMP, TCP, IGMPv1, IGMPv2, ARP, DHCP, DNS, NTP, BGP, NAT, Diffserv Marking

### Multilingual Web GUI

Manage web GUI via configurable management IP address

## Mechanical and Environmental

Dimensions: W 8.2 cm x D 17.7 cm x H 21.2 cm  
 (W 3.23 in x D 6.96 in x H 8.34 in)

Weight: 0.48 kg (1.05 lbs)

### Temperature:

Operating 0° to +40°C (32° to +104°F)  
 Storage -10° to +60°C (14° to +140°F)

### Humidity:

Operating 5 - 95% non-condensing

## Power Supply

Input Voltage 50Hz\220-260 V, 60Hz\100-130 V  
 24 VDC

Mains Power Consumption 60W maximum

Modem Power Consumption 21W maximum



### Key Features

- High Level of integration
- Low power consumption
- Suitable for all weather conditions
- Ku/Ka-dual band antennas support operational flexibility

### ODU Portfolio

ODU Type	Ku-band			Ka-band						Watt
	ILB2140 ANT2010 0.75 m	ILB2140 ANT2025 1m	ILB2141 ANT2035 1.2 m	ILB2220 ANT2010 0.75 m	ILB2220 ANT2025 1m	ILB2221 ANT2035 1.2 m	ILB3210 ANT2010 0.75 m	ILB3210 ANT2025 1 m	ILB3211 ANT2035 1.2 m	
Rated Power	2	2	2	2	2	2	2	2	2	
Rx Frequency Range	10.7 - 12.75			18.1 - 20.2			17.7 - 20.2			GHz
Tx Frequency Range	13.75 - 14.5			28.1 - 30.0			29.0 - 30.0			GHz
Return Waveform Support	4CPM Only			4CPM Only			4CPM & Mx-DMA MRC			

### LNB Interface

ILB2140/ILB2141 : 2 F-connectors

ILB2220/ILB2221/ILB3210/ILB3211: 1 F-connector



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