MDM2010 Satellite Modem

ST Engineering



The Newtec 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 supporting DVB-S2X forward and featuring the high throughput, flexible MF-TDMA and Mx-DMA MRC (Multi-resolution coding) returns. Dialog modems guarentee high efficiancy and availability.

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-S2X support up to 500 Msps in the forward link
- Mx-DMA with MRC (Multi-Resolution Coding) up to 10 Msps return Link
- 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

powered by ______

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Network Configuration

Network Topology	Rx	Тх				
	DVB-S2/DVB-S2X	Mx-DMA - MRC (Multi-ResCoding)	MF-TDMA			
Modulation	QPSK, 8PSK, 16APSK, 32APSK, 64APSK	QPSK, 8PSK, 16APSK, 32APSK, 64APSK	4CPM			
Symbol Rates	256 ksps to 500 Msps	Up to 10 Msps	Up to 7.6 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
LNB power	13/18VDC, 500mA
Data Interface	

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

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

Housing		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

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



ey Features

High Level of integration
Low power consumption
Suitable for all weather conditions

• Ku/Ka-dual band antennas support operational flexibitiy

ODU Portfolio

	Ku-band			Ka-band					
	ILB2140	ILB2140	ILB2141	ILB2220	ILB2220	ILB2221	ILB3210	ILB3210	
ODU Type	ANT2010	ANT2025	ANT2035	ANT2010	ANT2025	ANT2035	ANT2010	ANT2025	
	0.75 m	1m	1.2 m	0.75 m	1m	1.2 m	0.75 m	1 m	
Rated Power	2	2	2	2	2	2	2	2	Watt
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		Mx-DMA MRC				

LNB Interface

ILB2140/ILB2141 : 2 F-connectors ILB2220/ILB2221/ILB3210: 1 F-connector