# MDM3310 SATELLITE MODEM





The Newtec Dialog modem series consists of two-way, high throughput DVB-S2X modems that meets 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 MDM3310 Satellite Modem supports a wide range of fixed IP services, including Internet/ intranet access, VoIP, enterprise connectivity, maritime and multicasting services. With its high data rates, the MDM3310 can also be used in backhauling applications. The wideband receive capability makes the MDM3310 a perfect fit for usage on HTS satellites. 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.

The 3310 modem is also offered as a board level variant, the SMB3310.

### **Markets**

Enterprise/SME Cellular backhaul Maritime Broadcast Government

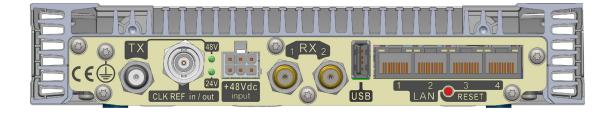
#### Features:

- DVB-S2 (up to 45Msps) / DVB-S2X (up to 500 Msps) outbound
- Supports DVB-S2X MODCODS up to 64APSK
- Return max rates up to 64 Msps (SCPC), 25 Msps (Mx-DMA)
- Ideal for both fixed and mobility applications
- OpenAMIP and GXT file support for mobility
- Security features with Optional AES128 scrambling
- Embedded TCP acceleration, GTP acceleration and header compression

#### DIALOG



## **ST Engineering**



## **Network Configuration**

| Network Topology | Rx                                    | Тх             |                              |                                      |                                       |
|------------------|---------------------------------------|----------------|------------------------------|--------------------------------------|---------------------------------------|
|                  | DVB-S2/DVB-S2X                        | MF-TDMA        | Mx-DMA HRC                   | Mx-DMA MRC                           | SCPC                                  |
| Modulation       | QPSK, 8PSK, 16APSK,<br>32APSK, 64APSK | 4CPM           | QPSK, 8PSK<br>16APSK, 32APSK | QPSK, 8PSK<br>16APSK, 32APSK, 64APSK | QPSK, 8PSK, 16APSK,<br>32APSK, 64APSK |
| Symbol Rates     | 1 Msps to 500 Msps                    | Up to 7.6 Msps | Up to 20 Msps                | Up to 25 Msps                        | Up to 64 Msps                         |

## **Modem Interfaces**

#### **Tx Interface**

| Connector                                   | F-Type 75 Ohm       |  |  |  |
|---|---------------------|--|--|--|
| Frequency range L-band                      | 950-2400 MHz        |  |  |  |
| TX level                                    | -55 dBm to +5 dBm   |  |  |  |
| BUC power supply                            | 24VDC, 4A/48V, 3.5A |  |  |  |
| BUC reference                               | 10/50 MHz           |  |  |  |
| Rx Interface                                |                     |  |  |  |
| Frequency                                   | 950-2150 MHz        |  |  |  |
| Connector                                   | F-Type 75 Ohm       |  |  |  |
| LNB power supply                            | 13/18VDC            |  |  |  |
| Polarization selection power supply voltage |                     |  |  |  |
| LNB LO selection                            | 22 kHz on/off       |  |  |  |
|   |                     |  |  |  |

#### Data Interface

LAN: Four 10/100/1000 Mbps Ethernet, auto MDI/MDIX

#### **Future Use**

USB

MicroSD

USB 2.0 mass storage option MicroSD cards

## 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   |           | W 22 cm x D 33cm x H 4 cm<br>(W 8.66 in x D 12.99 in x H 1.57 in) |
|-----------|-----------|---|
| Weight    |           | 1.7 kg (3.75 lbs)   |
| Temperatu | re:       |   |
|           | Operating | 0° to +55°C (32° to +131°F)                                       |
|           | Storage   | -30° to +60°C (-22° to +140°F)                                    |
| Humidity: |           |   |
|           | Operating | 5 - 95% non-condensing  |

## **Power Supply**

| Modem   | 48VDC, 4 Amps input                           |
|---------|---|
| Adapter | AC, 50Hz\220-260V and 60Hz\100-130V<br>-48VDC |