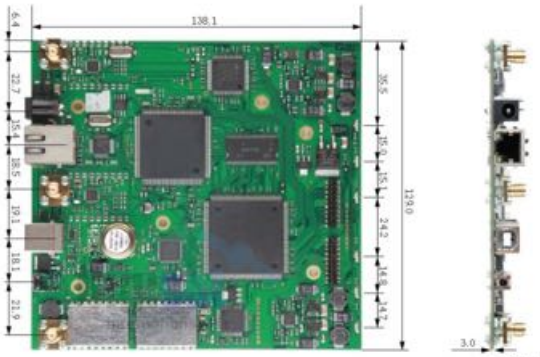
SATELLITE MODEM ROUTER

Model Type: MOD1100A

The 1100 satellite modem router is a device housed in a compact and reliable case and can be installed on a **multitude of customized solutions. Low power consumption** and extraordinarily fast startup at start-up facilitate the use of alternative energy sources, such as solar batteries. The integrated **high performance IP router** supports several protocols and has expanded the means to provide quality of service (QoS).



1100 VSAT Router Card

Technical Features:

-Various operating modes and topologies:
SCPC, TDM / TDMA, TDM / TDMA Mesh, Hubless TDMA
-Two demodulators with separate IF inputs and SCPC / TDMA universal modulator
-Adaptive encoding and modulation (ACM) in round-trip channels, including SCPC mode
-Offers up to 60,000 pps and 150 Mbps aggregate throughput productivity and 150 compressed voice calls
-Innovative TDMA protocol with LDPC coding and proven 96% efficiency compared to SCPC
-VSAT system with very low latency, with a return delay of about 570 ms for the TDMA operating mode
-VLAN support, multilevel QoS, real-time traffic codec management, TCP acceleration
-Built-in adaptive hierarchical traffic shaper specially designed for VSAT applications
-Integrated web-based management interface, user-friendly software configuration
-Functionality Quick start-up of the network: the network is ready for use in less than a minute when it is switched on
-Low power consumption: less than 10 watts (without RF ODU)
-Functionality Compatible with most of the C, Ku and Ka-band RF systems, it supplies power and reference signals
-Support for automatic redundancy schemes 1: 1 or 1: N without using external controllers
-Extreme versatility 1100 is ideal for applications such as:
-Corporate Networking
-Videoconference
-Functionality Distribution and contribution of the video
-Voice functionality and data trunking
-Cell backhaul
-Broadband Internet access.

DNV·GL ISO 9001:2015

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NETWORK										
Topology	“point-to-point”, “hub and spoke”, “multilevel tree”, “mesh”									
Modes of operation	SCPC, SCPC DAMA, TDM/SCPC, TDM/TDMA, TDM/TDMA Mesh, Hubess TDMA									
Network size	SCPC, SCPC DAMA, TDM/SCPC, TDM/TDMA, TDM/TDMA Mesh, Hubess TDMA									
SCPC (TDM) CHANNEL										
Modulation	DVB-S2 ACM: QPSK, 8PSK, 16APSK, 32APSK (Rx-only); TLC; roll-off 20%									
Symbol Rate	300 kSps - 32 MSps with 1 kSps step									
Demodulator Performance C/N, BER <10-8	**FEC**	**1/3**	**2/5**	**1/2**	**3/5**	**2/3**	**3/4**	**4/5**	**5/6**	**8/9**
	QPSK	-0.9	-0.0	-0.9	2.6	3.3	4.2	5.0	5.5	6.4
	8PSK	-	-	-	7.6	7.5	8.6	-	9.9	11.3
	16APSK	-	-	-	-	10.3	11.0	11.8	12.2	13.4
	32APSK	-	-	-	-	-	12.7	13.6	14.3	15.7
QoS	4-Level prioritization, traffic policies, CIR, MIR, group QoS, hierarchic traffic shaper, FAP									
TDMA CHANNEL										
Modulation	BPSK, QPSK, 8PSK, LDPC; ACM; TLC; roll-off 20%									
Symbol Rate	100 kSps - 4 MSps with 1 kSps step									
TDMA Protocol	frame 30 - 1000 ms, 8 slot sizes, manageable minimal bandwidth; slot-to-slot fast MF-TDMA hopping									
Demodulator Performance C/N, BER <10-8	**FEC**	**2/3**	**5/6**							
	BPSK (LDPC ACM)*	2.9	3.8							
	QPSK (LDPC ACM)	5.4	6.9							
	8PSK (LDPC ACM)	9.6	12.0							
QoS	CIR, MIR, group QoS, FAP, RT traffic support, y/night, hierarchic manager of TDMA bandwidth									
ROUTER										
Performance	up to 60’000 packets per second; 150 Mbps aggregate throughput									
Support	DSCP, multiple IP/VLANs, NAT, proxy ARP, L2 Bridging, TCP Acceleration and header compression									
Protocols	DHCP, IGMP, SNMP, RIP, SNTP, TFTP, cRTP									
Management	HTTP interface, SNMP, Telnet, NMS with VNO support									
INTERFACES										
User LAN port	Ethernet 10/100 Base-T, RJ-45									
Maintenance console	USB, B female									
IF Rx	950-2050 MHz (LNB DC - 13.5V/18V 0.75A), F or SMA type									
IF Tx	950-1750 MHz, -30... -5 dBm, (LO 10 MHz/ +5 dBm, BUC DC - 24V/2A), F or SMA type									
Power	24VDC, 10 Watt, PWL - 2c connector with 3.96 mm step									
MEHANICAL/ENVIRONMENTAL										
Operating Temperature	-40 °C... +50 °C, humidity up to 100%									

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