

Software Defined Indoor Unit (IP Modem) up to 620Mbps



> SDIDU - HS - In configuration 1 + 0 (Option)



> SDIDU - HS - In configuration 2 + 0 (Option)

Main Features

Up to 310Mbps data throughput, full duplex.

Available modulation schemes:

Programmable QPSK/6QAM/32QAM/64QAM/128QAM/256QAM.

- Available channel bandwidth:
 - > ETSI standards : 7/14/28/40 and 56 MHz
 - > ANSI standards : 10/20/30/40 and 50 MHz.
- Customer network data interface:
 - > 1 x Gigabit Ethernet (100/1000Base-T)
 - > 1 x 10/100BaseTX for data or management
 - > 1-2 x E1 / T1 plug-in extension module
 - > 1 x E3 / DS3 plug-in extension moexternal mux
 - > 4 x ASI In/Out (half duplex) or 2 x TX + 2 x RX (full duplex)
- Configuration:
 - Mix of TDM + Ethernet / Ethernet only / TDM only
 - Capacity is dynamically allocated between E1/T1/E3/DS3 channels and Ethernet
- IF/ODU interface
 - N-type connector standard configuration 350 / 140 MHz IF ODU.

HS-IDU is a software defined Indoor Unit optimized for high speed Ethernet networking with optional combination of side channels for E1/T1 or E3/T3 line interfaces, thanks to plug-in cards to add to the basic unit.

Thanks to the scalable concept, this system offers the flexibility to increase the transmission capacity depending on application needs. The system provides full range of modulation schemes from QPSK to 256QAM, arbitrary bandwidth selection in respect to both ETSI and ANSI standards and data throughput rates up to 310 Mbps.

In the typical Split -Mount configuration ODU's can be connected to the IDU over standard intermediate Tx and Rx IF frequencies (+DC pw supply + telemetry) through a coax connections. Link management is supported via a web GUI and SNMP with custom MIB.

Applications

- Digital microwave systems optimized for Ethernet traffic transmission /mix Ethernet + TDM
- Non-standard applications based on customer specific requirements also available

Other Features

- Management
 - > IP based (HTTP via web GUI, SNMP with MIB, Telnet)
 - > 1 x USB A for mass storage device (FW upgrade, backup,..)
 - > 1 x USB B serial port
 - > 1 x RS-232 serial port

Default

Option

SPEED RATE
155 Mbps

WIDE BAND
310 Mbps

System Available configurations

1 + 0
155 or 310Mbps

2 + 0
620 Mbps



PAYLOAD INTERFACE PARAMETERS

Gigabit Ethernet	Line Rate	Full-Duplex, scalable up to 310 Mbps
	Interfaces	1 x 10/100/1000 Base-T (RJ45) 1 x 10/100 base-T (Rj45)
	Maximum packet length	1632 Bytes
E1 / E3	Line Rate	1-2 x 2.048 / 1 x 34.368 Mbps
	Interfaces	G703 RJ45 / BNC
	Test Utility	Loopback, Internal BER tester
ASI	Half-Duplex-TX	4 X AS TX
	Half-Duplex-RX	4 X ASI RX
	Full-Duplex	2X ASI TX + 2X ASI RX

MECHANICAL/ENVIRONMENTAL

Dimensions	IDU: "HALF"19" standard rack (1U), 210 x 44 x201mm ODU: D 260mm x H 160mm
Weight	IIDU: 2 Kg; ODU: 6.0 Kg
Operating Temperature	IDU: -5° to +45°C; ODU: -33° to +55°C (Arctic option -50°C)
Altitude	Up to 4500 meters
Humidity	IDU: 95% condensing; ODU: 100% all-weather
Power Input	-48V DC (-36V to -60V DC)
Power Consumption	IDU + ODU < 45 Watts
Cooling	Natural convection
Coaxial Interfaces	IDU N-type female, ODU N-type female
IDU-ODU Cable	Belden 9913/RG-8, up to 300m
Antenna Interface	Coaxial N-type connector (6-11 GHz); proprietary direct mount (13GHz and above)
Standards Compliance	ETSI ETS 300 019, Part 1-3 Class 3.2 (IDU) - Part 1-4 Class 4.1 (ODU)