

Y-Packet

Traffic Aggregation Node

FEATURES

- Full range ITU-R frequencies: 6–38 GHz
- High Tx power and low Rx threshold leads to excellent System Gain
- QPSK — 4096QAM modulations with AMR
- Pure Packet operation with IP/MPLS support
- Electrical and optical (MM, SM) Gigabit Ethernet Interfaces available
- Radio channel, interfaces, sub-network protection schemes
- Flexible Synchronization support
- Low CAPEX, equipment has high MTBF and low OPEX

PRODUCT OVERVIEW

Y-Packet is a new innovative solution for full IP networks. This is not just a Layer 2 microwave, it is a native IP/MPLS microwave. Now when Layer 3 is required even on Aggregation level, this equipment is the preferred choice of mobile operators for any needed application.

Y-Packet can be used in different ways: as full ODU and as split type. High modulation types, wide channel bandwidth, adaptive modulation feature, different radio protection options even with space diversity, full IP/MPLS stack support and all of these with low CAPEX and OPEX — this is all you need for your network.



46...500 Mbps

-50...+50 °C

Low **CAPEX**
and **OPEX**

IP/MPLS

SPECIFICATIONS

SYSTEM GAIN

Radio Features	Transmitter					Receiver						
Frequency band, GHz	6...11	13...15	18	23	38	6	7...8	11	13...15	18	23	38
Modulation	Maximum output power, dBm					Sensitivity, dBm BER10 ⁻⁶						
QPSK	34	29	25	24	23	-87	-86	-84	-85.5	-82.5	-82	-83
16QAM	32	28	22	21	20	-79	-78	-78	-77.5	-76.5	-76	-76
32QAM	32	27	22	20	20	-76	-75	-74.5	-74	-73.5	-73	-73
64QAM	31	26	21	18	19	-72	-72	-71	-71	-70.5	-70	-70
128QAM	30	25	20	17	19	-69	-69	-68	-67.5	-67.5	-67	-66
256QAM	29	24	20	16	18	-65.5	-65	-65	-64.5	-64.5	-64	-63
512QAM	28	23	19	15	17	-61	-61	-61	-60.5	-60.5	-58	-59
1024QAM	28	23	19	14	17	-59	-59	-59	-58.5	-58.5	-56	-56
Power adjustment range 0...-22 dB, step 1 dB manual / ATPC						AGC range ≥50 dB						

CAPACITY, MBPS

Modulation	Channel Bandwidth, MHz	
	28	56
QPSK	46	92
16QAM	101	205
32QAM	129	263
64QAM	157	320
128QAM	185	377
256QAM	214	439
512QAM	242	482
1024QAM	255	508

OTHER

Traffic interfaces	up to 2x10G Ethernet, 4xGigabit Ethernet (SFP), 12xGigabit Ethernet (RJ45)		
Network Management	NMS "Master M"		
Protocol / Interface	SNMP / Ethernet		
ODU-IDU cable	Optical single-mode, up to 15 000 m ODU-IDU distance		
ODU power cable	Electrical, maximum length, m: 150 / 250 / 400 vs cable gauge 2×1.5 mm ² / 2×2.5 mm ² / 2×4 mm ² (U _{SUPPLY} = -48 V) 350 / 600 / 900 vs cable gauge 2×1.5 mm ² / 2×2.5 mm ² / 2×4 mm ² (U _{SUPPLY} = -60 V)		
Mounting Type	all-outdoor	split mount	
Unit Type	ODU	ODU	IDU
Operating Temperature	-50 ...+50 °C	-50 ...+50 °C	+5...+45 °C
Power Consumption	ODU <60 W	ODU <60 W	IDU <30 W
Power Supply Voltage	-39...-72 V	-39...-72 V	-40...-57 V
Dimensions / Weight	264×270×125 mm / <5 kg	264×270×125 mm / <5 kg	480×44×320 mm (19", 1RU)