

Full Packet All-in-one 80GHz Radio

The iPasolink EX Advanced is a high capacity, multi function, low latency radio solution in a compact design offering up to 10Gbps of capacity and using only 70W of power. This compact solution offers some unique benefits such as Adaptive Modulation from 1/4 BW QPSK to 256QAM, and Adaptive channel Bandwidth control from 62.5 to 2000MHz (AMBR) to offer the highest link availability and capacity.

EX Advanced Radio Solution:

- Compact all outdoor 10Gbps radio with 2 x 10G interfaces
- 1/4QPSK to 256QAM Adaptive Modulation – 9 steps
- 62.5 to 2000MHz Adaptive Bandwidth – 7 steps
- 3 x Ethernet Ports – 1 x RJ45/PoE, 2 x SFP for 1G or 10G
- DC or PoE options for power
- High TX Gain of 18dBm @ QPSK
- H-QOS, ERPS, EOAM, SYNC-E, 1588 v2 TC/BC support
- In-Band and Out/Band Management
- 0.2, 0.3m and 0.6m single, and dual pole antenna options
- XPIC option on any antenna size for 20Gbps linking



All –
Outdoor

10Gbps
&
10GbE

AMBR

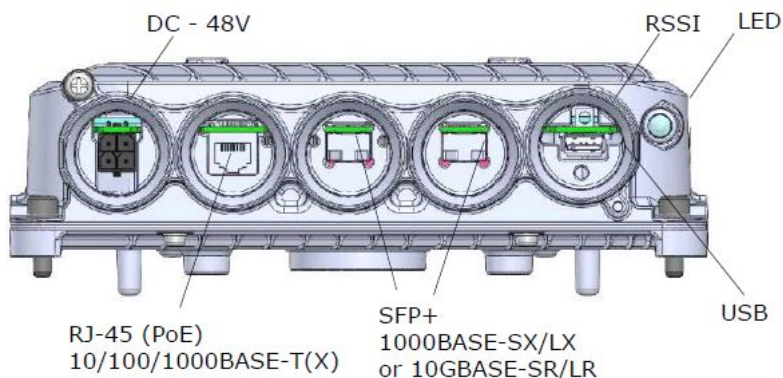
Small
form
factor

H-QOS
ERPS
SYNC-E

The EX Advanced provides a high capacity solution to provide fibre redundancy, high capacity linking, topology redundancy and to build overlay networks in congested areas by using a single integrated solution with multiple ports and a maximum capacity to 20Gbps.

Connectivity:

- Power – 48V DC or PoE – 70W
- RJ45/PoE 10/100/1000Base-R
- 2 x SFP for 1 and 10Gbps
- USB for configuration upload
- RSSI for Antenna Alignment
- LED confirms the equipmnet status and operation of the radio.



Full Capacity with AMBR:

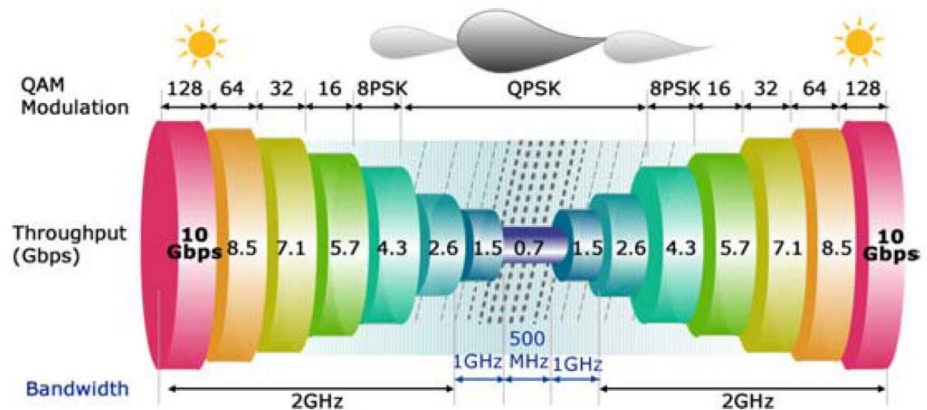
The combined features of adaptive modulation and bandwidth (AMBR) ensure that maximum Ethernet capacity can be achieved with varying path conditions, the 9 modulation steps and 7 bandwidth options are utilised to protect and maximise the capacity on the radio link at all times.

iPasolink EX Advanced Maximises transmission capacity of the 80GHz spectrum, users benefit from fast stable 10Gbps capacity increasing customer satisfaction and revenue. When the full 10Gbps is not available the multiple AMBR options will maintain the highest link capacity and availability.

iPasolink EX Advanced

Modulation \ Bandwidth	Throughput					
	2GHz	1GHz	500MHz	250MHz	125MHz	62.5MHz
256QAM	-	-	3.1Gbps	1.4Gbps	700Mbps	350Mbps
128QAM	10Gbps	5.5Gbps	2.8Gbps	1.2Gbps	610Mbps	310Mbps
64QAM	8.6Gbps	4.7Gbps	2.4Gbps	1.1Gbps	520Mbps	260Mbps
32QAM	7.2Gbps	3.9Gbps	2.0Gbps	880Mbps	440Mbps	220Mbps
16QAM	5.8Gbps	3.1Gbps	1.6Gbps	700Mbps	350Mbps	180Mbps
8PSK	4.3Gbps	2.4Gbps	1.2Gbps	530Mbps	260Mbps	130Mbps
QPSK	2.9Gbps	1.6Gbps	790Mbps	350Mbps	170Mbps	90Mbps

Using AMBR the radio will hitlessly adjust the modulation of the radios and also adjust the channel bandwidth that the radio uses to give maximum capacity and availability at all times.



EX Advanced Technical Specifications:

iPasolink EX Advanced	
Frequency Range	71-76GHz and 81-86GHz FDD
Modulation	(1/4 BW) QPSK / (1/2 BW) QPSK / QPSK / 8PSK / 16 / 32 / 64 / 128 / 256QAM
Band Width	62.5/125/250/500/750/1000/2000MHz ETSA/ANSI
Interfaces	RJ45 1Gbps, 2 x SFP for 1 or 10Gbps interfaces
Switch Features	Line-rate, non blocking switch, 32K MAC learning table
	VLAN 802.1Q, EPL, EVPL and ELAN Services with L2CP
	MTSP IEEE802.1s for redundnacy and loop-prevention
	Link Aggregtaion IEEE802.3AX with LACP
	Filtering Function and G.8032v2 ERP
	Packet Classification - 802.1p CoS, DSCP, MPLS TC
	H-QoS, Egress Shaping Port and Class
Power	DC or PoE
Maximum Capacity	10Gbps - 2000MHz @ 128QAM
Synchronization	Synchronous Ethernet, 1588v2, TC and BC
Ethernet OAM	ITU-T G.8013/Y.1731v4
Antennas	Direct Mount, 0.2, 0.3 and 0.6m
Ambient Temperature	(-33.C to +55.C)
Power Voltage	(-40.3 to 57V DC)
Power Consumption	65W Typical
Dimension and Weight	230 x 230 x 65mm and 3.5kg

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