

**Specifications**

Features	
Radio Functions	
Radio frequency	6/7/8/10/11/13/15/18/23/26/28/32/38/42 GHz
Channel Separation	7/14/28/40/56 MHz
Modulation	QPSK/16/32/64/128/256/512/1024/2048QAM with Hitless AMR
Capacity	1Gbps without Compression (56MHz CCDP)
Configurations	1+0, 1+1 HS/SD, 1+1 FD,2+0, CCDP (XPIC)
Packet Functions	
Ethernet Interface	10BASE-T, 100BASE-TX, 1000BASE-T/SX/LX
VLAN	IEEE802.1ad Provider Bridge, IEEE802.1Q VLAN
QoS	Egress 8 Classes Queueing, Ingress 8 Classes Classify (CoS/Diffserv/MPLS EXP)
STP	MSTP, RSTP (IEEE802.1w)
ERPS	G.8032v2 ERPS
LAG	LAG/LACP (802.1AX), Radio Traffic Aggregation (Physical Layer; RTA)
Header Compression	L2/L3/L4 Header Compression, Payload Compression
Clock Synchronization	SyncE, IEEE1588 v2
Maintenance	PMON/RMON, ETH OAM (802.1ag CC/LB/LT, IEEE 802.3ah Link OAM, Y.1731 LM/DM)
Management Plane	Inband DCN, M-Plane Access Control List
Physical Interfaces	3 GbE Ports (1xElectrical / 2xSFP), LCT/NMS port
Power Supply	-48V DC Power Supply Port
Dimensions (mm)	Approx. (6-11GHz) 253 X 253 x 140 /7kg, (13-42GHz) 253 X 253 x 127/ 6kg

Specifications are subject to change without notice.

**Abbreviations**

AMR	Adaptive Modulation Radio	HS	Hot Standby	QAM	Quadrature Amplitude Modulation
Approx.	Approximately	IEEE	Institute of Electrical and Electronics Engineer	QoS	Quality of Service
CAPEX	Capital Expenditure	IP	Internet Protocol	QPSK	Quadrature Phase Shift Keying
CCDP	Co-Channel Dual Polarization	LTE	Long Term Evolution	RMON	Remote Monitoring
CoS	Class of Service	MDU	Main Digital processing Unit	SD	Space Diversity
eNB	evolved Node B	MME	Mobile Management Entity	ToS	Type of Service
EMC	Electro Magnetic Compatibility	MODEM	Modulation and Demodulation	TP	Twin Pass
ETSI	European Telecommunication Standard institute	Node-B	Wireless Base Station Equipment	UPE	User Plane Entity
FD	Frequency Diversity	ODU	Outdoor Unit	VLAN	Virtual LAN
GbE	Gigabit Ethernet	PMON	Performance Monitoring		

# New Concept Mobile Backhaul Packet Radio iPASOLINK iX

## Universal All-Outdoor Packet Radio

- High Reliability
- High Power
- Free RF
- Non-Blocking
- Flexible Config.
- TWO in ONE



# Universal Packet Radio for LTE and future Mobile Backhaul

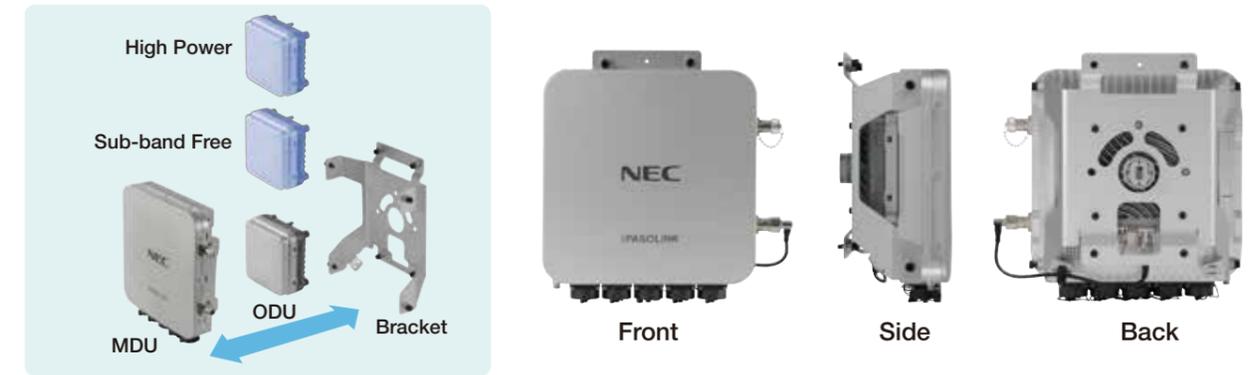
NEC's new outdoor unit embodies its worldwide reputation for high performance and reliability whilst at the same time acknowledging recent trends for smaller form factor and zero foot print equipment.

Conventional All outdoor radio (AOR) systems lose some functionalities in order to achieve the smaller form factor, that results in the need for additional peripheral equipment like L2 switch and PoE in order to maintain necessary functionalities. iPASOLINK iX overcomes the need for additional peripheral equipment and each small aesthetic chassis accommodates all necessary features and functionalities to provide operators with operationally ready equipment for quick and easy implementation.

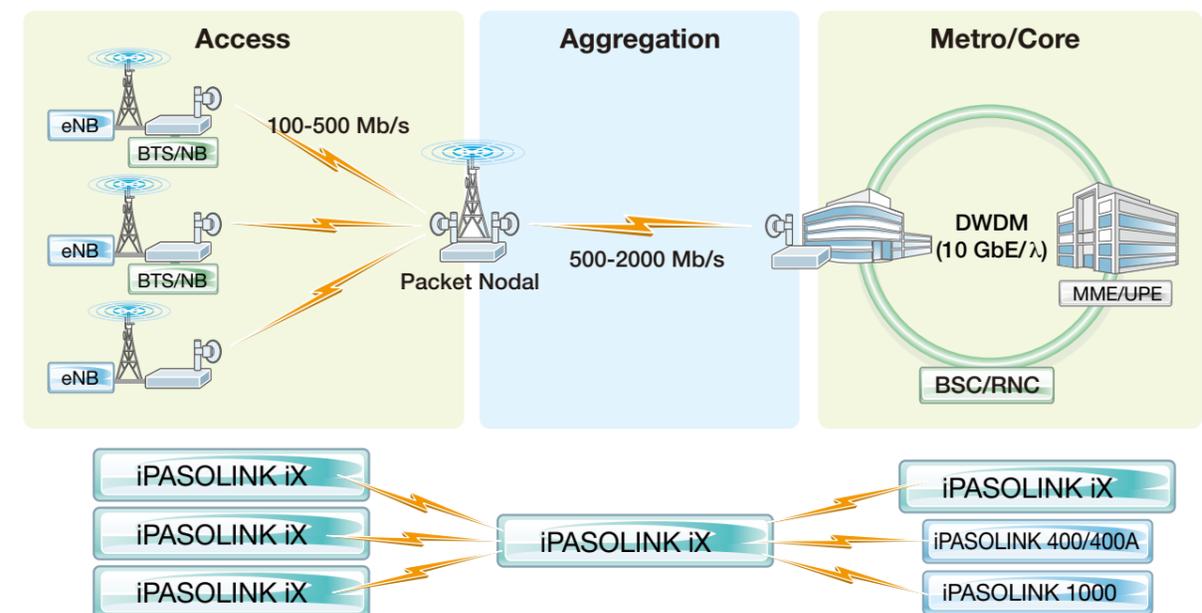
1+1 hot-standby, space diversity and CCDP (XPIC) can be supported in a single chassis that supports up to two built in modems. NEC chooses to separate the RF circuitry by applying the same principles and philosophy as for split mount systems, this provides operators with a full frequency menu and commonality for ultimate flexibility and spares management.

iPASOLINK series equipment have compatibility with the new iPASOLINK iX and this concept increases the deployment options in backhaul network construction. MPLS-TP, IP-MPLS and SDN architectures that control networks autonomously can easily be realised in conjunction with iPASOLINK iX and other products like routers and switches in NEC's solutions portfolio.

## New Concept All Outdoor Radio



## iPASOLINK iX Application Network Sample



## iPASOLINK iX Features

### High environmental responsiveness

- The same highest performance is demonstrated in various environments, such as cities, countries, mountain ranges, deserts, islands, and damp areas.

### Reducing CAPEX and OPEX

- Easy installation and quick deployment by all outdoor configuration including all peripheral devices decrease CAPEX and OPEX decreases due to no requirement for air conditioner system.

### High reliability

- The high link reliability due to high system gain combined with low failure rate generates peerless total high system reliability.

### Non-blocking carrier class switch

- High performance carrier class non-blocking switch realizes perfect transmission efficiency.

### Flexible system compatibility

- iPASOLINK iX is flexible, programmable, and scalable in order to apply MPLS-TP, IP/MPLS, SDN and OpenFlow network architecture.

### Link compatibility to iPASOLINK series

- iPASOLINK iX and iPASOLINK series full compatibility allows effective usage of existing equipment.

### Free RF band selection

- This flexible composition of iPASOLINK iX allows system configuration changes or network configuration changes without a hassle.

### Free Radio configuration (1+0/1+1 HS/1+1 SD/1+1FD/CCDP(XPIC))

- Various system configurations are possible using same MDU and ODU. The future network system can be built on the novel idea which sweeps away the conventional AOR concept.

## Flexible Configuration

