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Data Sheet

General Availability

10G EADs

ETX-2i-10G, ETX-2i-10G-B

Ethernet Business and Cell-Site Gateways

- Advanced 10G Ethernet demarcation and aggregation devices, delivering SLA assured, MEF 3.0 certified Carrier Ethernet VPN services
- Advanced traffic management with hierarchical QoS and high-scale flow management
- TWAMP and Layer-2 OAM diagnostics for scalable and accurate performance monitoring, quick fault detection, and troubleshooting of Layer-2 and Layer-3 networks
- Flexible hardware, optional license activation, up to eight HW-configurable 1GbE/10GbE ports, grow-as-you-go upgradable interfaces for a multipurpose device
- Precision timing synchronization for mobile networks
- NEBS Level 3 option with front-to-back airflow
- IP66-compliant, protected enclosures for outdoor installations

ETX-2i-10G, ETX-2i-10G-B, part of RAD's Service Assured Access solution, provide service demarcation and aggregation at 10 GbE and 1 GbE data rates. (Details on ETX-2i 1G devices and ETX-2i 100G devices can be found in dedicated data sheets.)

ETX-2i-10G, ETX-2i-10G-B enable operators to deliver service level guarantees, by supporting multilayer diagnostics, fine-grained SLA enforcement, and accurate performance monitoring. Built-in service activation testers support verification of end-to-end network performance.

Best-in-class traffic management capabilities include an advanced classification engine, VLAN manipulation, and sophisticated service shaping, providing operators full flexibility and control over traffic flows.

ETX-2i-10G, ETX-2i-10G-B comes with NEBS support and provides front-to-back airflow. This is effective for communication rooms with strict air-cooling design such as data centers.

MARKET SEGMENTS AND APPLICATIONS

ETX-2i-10G, ETX-2i-10G-B are ideal for carriers, service providers, municipalities, wholesale providers, and mobile operators seeking to offer unified, SLA-based Ethernet business services, such as E-Line, E-LAN, E-Tree, and E-Access, as well as L3 VPNs and value-added services using virtualization at the customer edge.

INTEROPERABILITY

ETX-2i-10G, ETX-2i-10G-B features and services are standard-based and can work with any 3rd party equipment using standard-based features and services.

NETWORK TOPOLOGIES

ETX-2i-10G, ETX-2i-10G-B support several network topologies such as linear, daisy chain, and self-healing rings (G.8032v2), working with ETX-5 or third-party Ethernet devices.

CARRIER ETHERNET 2.0 SERVICES

ETX-2i-10G, ETX-2i-10G-B incorporate a complete set of MEF 3-certified Ethernet service tools that allows service providers to distinguish between high- and low-priority traffic and optimize TCP sessions.

ETX-2i-10G, ETX-2i-10G-B provide MEF 10.3 color-aware and unaware Policers, delivering high-scale multi-CoS services with hierarchical Quality of Service (HQoS).

They support advanced scheduling, WRED per CoS, shaping per EVC and port, with flexible classification rules and access lists.

DHCP Snooping

ETX-2i-10G, ETX-2i-10G-B support DHCP snooping with option 82 for protection of DHCP transactions.

Layer-2 Control Processing

ETX-2i-10G, ETX-2i-10G-B can be configured to forward or discard Layer-2 control frames (including other vendors' L2CP frames).

MEF Services

ETX-2i-10G, ETX-2i-10G-B deliver E-Line (EVL, EVPL), E-LAN (EPLAN, EVPLAN), E-Tree (EP-TREE, EVP-TREE), and E-Access services compliant with MEF 3.0 and CE 2.0 certifications.

MLDv2 Snooping

With MLDv2 snooping, multicast data is selectively forwarded only to a list of self-learned ports (per multicast group membership), instead of being flooded to all ports in a VLAN.

RAD

Your Network's Edge®

ETX-2i-10G, ETX-2i-10G-B

Ethernet Business and Cell-Site Gateways

Data Sheet

TDM PSEUDOWIRE

ETX-2i-10G provides pseudowire (PW) services via a smart SFP (RAD's MiTOP). PWs can be encapsulated using CESoPSN per IETF RFC 5086 or SAToP per IETF RFC 4553.

ETHERNET OVER PDH

ETX-2i-10G provides Ethernet over PDH services via a smart SFP (RAD's MiRICi), including the following NG-PDH technologies:

- Generic Framing Procedure (GFP G.7041)
- GFP over PDH (G.8040)
- PDH Virtual Concatenation (VCAT G.7043)
- Link Capacity Adjustment Scheme (VCAT G.7042).

NG-PDH solutions improve overall network availability by reducing latency and optimizing line utilization and throughput.

Integrated management of MiRICi smart SFPs provides TDM (E1/T1/E3/T3/OC-3/STM-1) connectivity over PDH or SDH legacy networks.

RESILIENCY

ETX-2i-10G, ETX-2i-10G-B offer fast protection for virtually any kind of failure, in any linear, ring, or dual-homed topology. The devices employ IEEE 802.3ad link aggregation, which can be 1:1 LAG and load-balancing LAG, with or without LACP (Link Aggregation Control Protocol), ITU-T G.8032v2 Ethernet ring protection, and ITU-T G.8031 Ethernet linear protection, to ensure continuous availability and sub-50 ms restoration in the event of network outages.

ETX-2i-10G, ETX-2i-10G-B also support MSTP and RSTP (IEEE 802.1Q) to perform loop-free bridge forwarding over mesh or ring physical topology.

TIMING AND SYNCHRONIZATION

ETX-2i-10G, ETX-2i-10G-B incorporate RAD's advanced SyncTop synchronization and timing over the packet feature set to support mobile heterogeneous network topology.

Synchronous Ethernet (SyncE) with IEEE 1588v2 Precision Time Protocol (PTP) per ITU-T G.8265.1, G.8275.1, and G.8275.2 telecom profiles provide cost-effective synchronization of frequency and phase.

ETX-2i-10G, ETX-2i-10G-B also support 1588v2 slave clock, boundary clock (BC), transparent clock (TC), and grand master (GM).

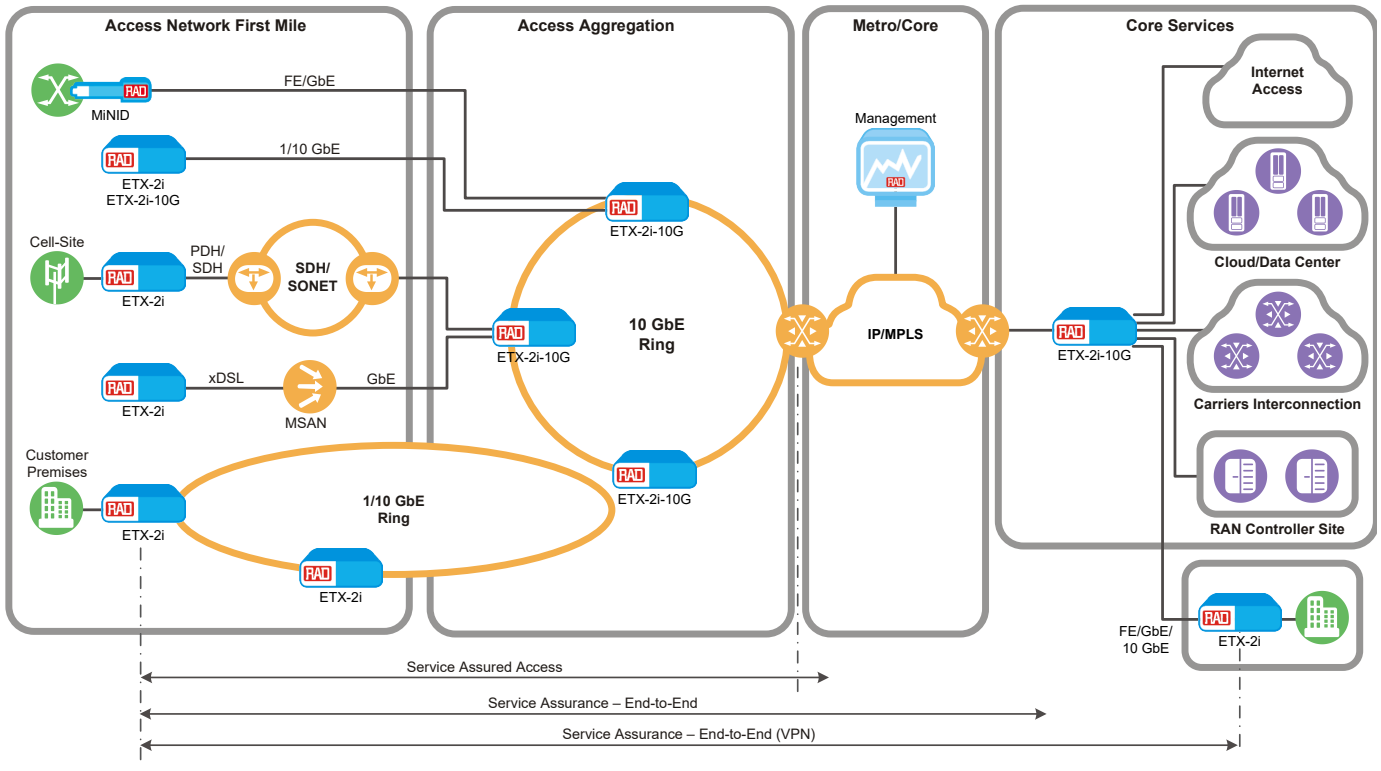


Figure 1. Access Aggregation with SLA-Based Services

ETX-2i-10G, ETX-2i-10G-B

Ethernet Business and Cell-Site Gateways

MONITORING AND DIAGNOSTICS

Featuring multi-layer OAM and PM tools, ETX-2i-10G, ETX-2i-10G-B offer hardware-based monitoring and diagnostics at high scale and precision. End-to-end connectivity OAM (IEEE 802.1ag), as well as single-segment OAM (IEEE 802.3-2005) ensure flow-level fault management and performance monitoring over Layer-2 networks. In addition, these mechanisms quickly detect connectivity failures for robust protection.

Layer-2 and 3 wirespeed loopbacks offer flexible diagnostic tools.

RFC-5357 TWAMP Light delivers the same functionality over Layer-3 networks, as well as one-way TWAMP and two-way ICMP Echo, with counters for loss, delay, fragmented packets, reorders, and duplication, in addition to configurable test packet sizes. Multi-VRF supports the robust TWAMP setup.

The Performance Management Portal is an SLA assurance system that is part of the RADview management system, enabling real-time monitoring of service performance.

Digital Diagnostics Monitoring

ETX-2i-10G, ETX-2i-10G-B support digital diagnostics monitoring (DDM) SFP functions according to SFF-8472, excluding external DDM calibration.

Service Activation Tests

ETX-2i-10G, ETX-2i-10G-B offer service activation tools with multiple RFC-2544, Y.1564, and L3 SAT testers.

MANAGEMENT AND SECURITY

ETX-2i-10G, ETX-2i-10G-B can be managed via RADview, RAD's carrier-class NMS, or any SNMP-based management system. The devices support a variety of access protocols, including CLI over Telnet, SNMPv3, and TFTP.

Security features include SNMPv3, RADIUS, TACACS+, SSH, and SFTP.

Access Control Lists (ACL) can be used to flexibly filter and mark management traffic, enabling service providers to maintain network security by dropping unwanted packets.

NETCONF/YANG

ETX-2i-10G, ETX-2i-10G-B are delivered ready for SDN transformation with comprehensive support for the NETCONF/YANG protocol, enabling operators to utilize modern network service orchestrators.

Zero Touch Provisioning

ETX-2i-10G, ETX-2i-10G-B implement RAD's unique ZT process, allowing devices to onboard automatically and securely without human intervention and enabling operators to provision services easily and reliably.

Table 1. Interfaces

Specifications	ETX-2i-10G/4SFPP (4+24) 	ETX-2i-10G-B/4SFPP (4+8), ETX-2i-10G/4SFPP (4+8) 	ETX-2i-10G-B/8SFPP, ETX-2i-10G/8SFPP ETX-2i-10G/HN/8SFPP 	ETX-2i-10G-B/8SFPP/ODU, ETX-2i-10G/8SFPP/ODU 
1/10GbE SFP+ (with 1G/10G multirate support)	4 SFP+ 1000BASE-SX/LX/T 1/10GBASE-SR/LR/ER/ZR	8 SFP+ 1000BASE-SX/LX/T 1/10GBASE-SR/LR/ER/ZR		
FE/GbE SFP	12 or 24 SFP, 12 ports SFP/RJ-45 combo 1000BASE-SX, 1000BASE-LX, 100BASE-FX, 1000BASE-T	4 SFP and 4 UTP, 8 SFP, or 4 SFP only 1000BASE-SX, 1000BASE-LX, 100BASE-FX, 1000BASE-T	8 GbE 1000BASE-SX, 1000BASE-LX, 1000BASE-T	
E1/T1/T3/STM-1/OC-3	Via integrated Smart SFP (MiRIC)			
E1/T1/T3 PW	Via integrated Smart SFP (MiTOP)			
Timing	2 MHz, 2 Mbps, 1PPS, ToD (outdoor unit connectors are internal.)			
GNSS	-		Mini BNC	TNC
CLI serial port	Mini USB		Micro USB	RJ-45

Note A: *It is strongly recommended to order this device with original RAD SFP/SFP+ transceivers. RAD cannot guarantee full compliance to product specifications for units using non-RAD transceivers. For full details on SFP/SFP+ transceivers, see the* ***Pluggable Transceivers data sheet****.*

Note B: *ETX-2i-10G offers license-based activation of the 10G/1G (SFP+) ports. ETX-2i-10G may be ordered with zero, two, four, or eight 10G activated SFP+ ports. The 10G ports may be field-activated by purchasing a 10G port activation license. Non-activated SFP+ ports are limited to operate at 1 Gbps. Activated SFP+ ports allow both 1G and 10G operation.*

ETX-2i-10G, ETX-2i-10G-B

Ethernet Business and Cell-Site Gateways

Specifications

INTERFACES

See **Interfaces** table.

MANAGEMENT

Management Options	Local management via LAN port or serial port
	Remote management via in-band VLAN
Protocols and Security	SSH (Secure CLI)
	Telnet
	SNMPv3
	SFTP
	NETCONF/YANG management interface
	Password-protected access
	Authorization levels
	RADIUS or TACACS+ authentication
	Static routing
	Access Control List (ACL)
Large Deployments	Plug and play zero touch provisioning (DHCP, PPPoE, XML configuration files download via TFTP/SCP)
	Configuration backup and restore

Control Port

Interface	V.24/RS-232 DCE
Connector	Mini USB: ETX-2i-10G/4SFPP, ETX-2i-10G-B/4SFPP Micro USB: ETX-2i-10G/8SFPP, ETX-2i-10G-B/8SFPF RJ-45: ETX-2i-10G-B/8SFPP/ODU
Format	Asynchronous
Data rate	9.6, 19.2, or 115.2 kbps

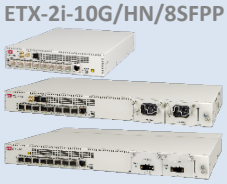
Ethernet Management Port

Type	10/100/1000BASE-T
Connector	RJ-45 (In ETX-2i-10G/8SFPP/ODU and ETX-2i-10G-B/8SFPP/ODU, connector is internal.)

ENVIRONMENTAL

Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Temperature	Regular: 0 to 50°C (32 to 122°F)
	Temperature hardened, outdoor: -40 to 65°C (-40 to 149°F) **Note:** For temperature-hardened options, use SFPs with max operation temperature of 85°C (185°F)

Table 2. Power

Specifications	ETX-2i-10G/4SFPP (4+24) 	ETX-2i-10G-B/4SFPP (4+8), ETX-2i-10G/4SFPP (4+8) 	ETX-2i-10G-B/8SFPP, ETX-2i-10G/8SFPP ETX-2i-10G/HN/8SFPP 	ETX-2i-10G-B/8SFPP/ODU, ETX-2i-10G/8SFPP/ODU 
Power Supply	AC: 100-240 VAC (-10%, +6%), 50/60 Hz, 0.9A DC: -48 VDC (40-60 VDC), 2A			
			Modular DC: 24 VDC (20-60 VDC), 2A Not for ETX-2i-10G/HN/8SFPP North American market only	
Power Supply Redundancy	+			
Power Consumption	120W (maximum) 110W (average) 100W (minimum)	**ETX-2i-10G/4SFPP 8.5”**: 82W (maximum), 72W (average), 65W (minimum) **ETX-2i-10G/4SFPP 19”**: 110W (max), 85W (average), 70W (minimum) **ETX-2i-10G-B/4SFPP 19**”: 70W (max), 55W (average), 50W (minimum)	75W (maximum) 55W (average) 50W (minimum) ~240 BTU/h	**Dual AC:** 87W (maximum), 65W (average), 60W (minimum) **Dual DC:** 80W (maximum), 60W (average), 55W (minimum)

ETX-2i-10G, ETX-2i-10G-B

Ethernet Business and Cell-Site Gateways

Humidity	5 to 90%, non-condensing
Airflow	19-inch enclosures: Left to right 19-inch NEBS enclosure: Front to back Half 19-inch enclosures: Front to back Outdoor units: None (passive airflow)
Fans	Hardened/NEBS: 4 fans Not hardened: 2 fans Outdoor enclosure: no fans

RESILIENCY

Dual Homing	1:1 link protection with dual homed link redundancy
Ethernet Path Protection	G.8031 for linear 1:1 protection
Ethernet Ring	G.8032v2 rings with sub 50 ms protection for Ethernet traffic
Link Aggregation	IEEE 802.1ax (802.3ad) 1:1 LAG with LACP for pairs of network or user Ethernet ports, together with 1:1 link protection
	LAG with load balancing

NETWORKING CAPABILITIES

Services	Ethernet E-LAN, E-Tree, E-Line
	MEF CE2.0 compliant
	Layer-2 services with available bandwidth
Layer-2 Forwarding	Jumbo frame support
Flow classification rules	Outer VLAN or outer + inner VLAN
	PCP
	TOS/DSCP
	EtherType
	IP/MAC source/destination address
Port classification (except for ETX-2i-10G/8SFPP, ETX-2i-10G-B/8SFPP)	Per port
	5-tuple ACL
Policing	Color aware/unaware dual token bucket with user-configurable CIR + CBS & EIR + EBS
	2-rate/3-color policing per EVC.CoS
	Bandwidth policing per MEF 10.3
	Hierarchical envelope policer per MEF 10.3
	MultiCoS EVCs per MEF 10.3
	Large flow policing (Fat pipe) – ETX-2i-10G half 19", ETX-2i-10G /8SFPP, ETX-2i-10G-B/8SFPP
Scheduling	8 × CoS per EVC scheduling elements
	Strict Priority (SP)
	Weighted Fair Queue (WFQ)
Shaping	Per port
	Per EVC
	Per EVC.CoS

BRIDGE

Max. Frame Size	9600 bytes (unless mentioned otherwise)
Compliance	802.1D, 802.1Q, 802.1ad
Mode	VLAN-aware, VLAN-unaware
VLAN Editing	Inner/outer VLAN editing per VLAN and p-bit values

DIAGNOSTICS

Alarm Relay (optional)	Type: Dry contacts with three "in"
	Connector: Terminal block, 9-pin
Connectivity Fault Management (CFM)	Per IEEE 802.1ag
Counters	RMON2 port-level counters
Delay and Loss Measurements	Per MEF 36
EFM Link-fault OAM	Per IEEE 802.3ah
ICMP Echo	Over L2 and L3 services
	Tests IP connectivity (PING)
KPI Measurements	Accurate one-way KPI measurements
Link-level OAM	Per IEEE 802.3-2005
Limiting Multicast Traffic Flooding	DHCP and MLDv2 snooping
Loop Prevention	Using MSTP and RSTP
Loopback Tests	Non-disruptive loopback per flow, with MAC/IP address swap
	Loopbacks at Ethernet port level
	On-demand Layer-2 and 3 loopbacks
LLDP Discovery	Per IEEE 802.1AB
Service Activation Tests	RFC-2544: Eight built-in wirespeed testers
	ITU-T Y.1564: Eight built-in wirespeed testers
Service Utilization and Performance Monitoring	Per ITU-T Y.1731.2012, including synthetic loss measurement
TWAMP	TWAMP light generator and responder (SW license)
	ITU-T Y.1731 PM (SLM; DM)
	RFC 5618 TWAMP responder and receiver
	TWAMP sender

ETX-2i-10G, ETX-2i-10G-B

Ethernet Business and Cell-Site Gateways

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GENERAL

Compliance	MEF 3.0: E-Access: Access EPL, Access EVPL E-LAN: EPLAN, EVPLAN E-Line: EPL, EVPL E-Tree: EP-Tree, EVP-Tree
	CE 2.0
	MEF 6: E-LAN: EPLAN, EVPLAN E-Line: EPL, EVPL
	MEF 9, MEF 10, MEF 14, MEF 20, MEF 36, MEF 46
	IEEE 802.3, 802.3u, 802.1D, 802.1Q, 802.1p, 802.3ad, 802.3-2005, 802.1ax, 802.1ag
	ITU-T Y.1731, G.8031, G.8032v2, G.8262, G.8265, RFC-2544, ITU-T Y.1564
Push Buttons	FD push button for setting unit to default configuration **Note:** In the ETX-2i-10G/8SFPP and ETX-2i-10G-B/8SFPP outdoor units, the button is in the chassis interior.

PHYSICAL

8.5-inch Enclosure	Height: 44 mm (1.7 in)
	Width: 215.5 mm (8.5 in)
	Depth: 301 mm (11.8 in)
	Weight: 2.3 kg (5.1 lb)
	NEBS option
	Temperature-hardened option
19-inch Enclosure	Height: 44 mm (1.7 in)
	Width: 440 mm (17.4 in)
	Depth: 240 mm (9.5 in)
	Single power supply – 2.5 kg (5.5 lb) Two power supplies – 3.9 kg (8.6 lb) 4+24 port configuration – 4.1 kg (9.04 lb)
	Temperature-hardened option
19-inch NEBS Enclosure	Height: 44 mm (1.7 in)
	Width: 440 mm (17.4 in)
	Depth: 300 mm (11.8 in)
	One power supply – 3.0 kg (6.7 lb) Two power supplies – 4.4 kg (9.8 lb)
IP66 Outdoor Enclosure	Height: 465.0 mm (18.3 in)
	Width: 300.0 mm (11.8 in)
	Depth: 106 mm (4.2 in)
	Two power supplies – 9.3 kg (20.5 lb)
	Temperature-hardened

Table 3. Timing and Synchronization

Specifications	ETX-2i-10G/4SFPP (4+24) 	ETX-2i-10G-B/4SFPP (4+8), ETX-2i-10G/4SFPP (4+8) 	ETX-2i-10G-B/8SFPP, ETX-2i-10G/8SFPP ETX-2i-10G/HN/8SFPP 	ETX-2i-10G-B/8SFPP/ODU, ETX-2i-10G/8SFPP/ODU 
NEBS Level 3	Designed to	Designed to	+	+
Best Master Clock Algorithm (BMCA)	+			
IEEE-1588v2 precision time protocol (PTP) per G.8265.1, G.8275.1, and G.8275.2 Telecom profiles	OC, TC, BC Slave clock		OC, TC, BC Slave clock Integrated GNSS	
PTP ports	ToD/1PPS (RJ-45), External clock (CONN.DIN 1.0/2.3, AKA mini-BNC), 1PPS (CONN.DIN 1.0/2.3, AKA mini-BNC), 2M (SMA) **Note:** Outdoor unit connectors are internal.			
Station clock	Balanced E1, unbalanced E1 (via adapter cable); RJ-45 connector			
SyncE recovery from PDH module to Ethernet ports	+ (when using MiTOP/MiRIC)			

ETX-2i-10G, ETX-2i-10G-B

Ethernet Business and Cell-Site Gateways

Ordering

The information below represents examples of supported configurations and ordering options. For additional configuration options, contact your local RAD partner. For a full list of ordering options, refer to the RAD catalog.

ETX-2I-10G, ETX-2I-10G-B SOFTWARE

ETX-2-SW TWAMP
SW license to activate and operate TWAMP related functionalities in ETX-2 and ETX-2i.

ETX-2i-10G-LIC/#
SFP+ 10G speed license for ETX-2i-10G/4SFPP, ETX-2i-10G-B/4SFPP

ETX-2i-10G-B-LIC/#
SFP+ 10G speed license for ETX-2i-10G/8SFPP, ETX-2i-10G-B/8SFPP

#	License scope	
	2X10G	Two-port (Two ports are 10G-enabled.)
	4X10G	Four-port (Four ports are 10G-enabled.)
	8X10G	Eight-port (Eight ports are 10G-enabled; relevant for ETX-2i-10G/8SFPP and ETX-2i-10G-B/8SFPP only.

ETX-2I-10G/4SFPP HARDWARE

(Refer to **Ordering Options** for options explanations)

ETX-2i-10G/AC/4SFPP/4SFP4UTP

ETX-2i-10G/DDC/4SFPP/4SFP4UTP/PTP

ETX-2i-10G/AC/4SFPP/8SFP

ETX-2i-10G/AC/4SFPP/4SFP

ETX-2i-10G-B/AC/4SFPP/4SFP4UTP

ETX-2i-10G-B/AC/4SFPP/8SFP/PTP

ETX-2i-10G-B/DDC/4SFPP/4SFP

ETX-2I-10G-B/19/ACR/4SFPP/4S4U/PTP

ETX-2i-10G/DCR/4SFPP/24SFP/PTP

ETX-2i-10G/H/ACR/4SFPP/12SFP12UTP/PTP

ETX-2i-10G/H/DCR/4SFPP/12CMB/PTP

ETX-2I-10G/8SFPP HARDWARE

(Refer to **Ordering Options** for options explanations)

ETX-2i-10G-B/8.5/AC/8SFPP

ETX-2i-10G-B/8.5/DC/8SFPP

ETX-2i-10G-B/8.5/H/DC/8SFPP/PTP

ETX-2i-10G-B/19/N/DCR/8SFPP

ETX-2i-10G/19/N/ACR/8SFPP

ETX-2i-10G-B/19/HN/DCR/8SFPP

ETX-2i-10G-B/H/AC/ODU/8SFPP

ETX-2i-10G-B/H/DCR/ODU/8SFPP/G

ORDERING OPTIONS

This glossary is meant to allow a better understanding of existing part numbers and not for the purpose of creating new ones as not all combinations are available. To check for the availability of additional product combinations, contact your local RAD partner.

Enclosure		
	8.5	8.5” 1U metal box
	19	19” 1U metal box
	ODU	Outdoor enclosure
Ethernet Network or User Port	2SFPP	2 SFPP (10GbE) and 2 SFP ports (without 10G-license; 10G-license upgradeable) ports
	4SFPP	4 SFPP 1/10GbE ports
	8SFPP	8 SFPP 1/10GbE ports
Ethernet User Port (GbE ports)	4S4U or 4SFP4UTP	4 SFP Ethernet ports, 4 copper Ethernet ports
	4S or 4SFP	4 SFP Ethernet ports (only 4 ports)
	8S or 8SFP	8 SFP Ethernet ports
	12S12U or 12SFP12UTP	12 SFP Eth ports, 12 copper Ethernet ports
	24SFP	24 SFP Ethernet ports
	12CMB	12 GbE combo (SFP/UTP) ports
Power Supply	AC	Single AC power supply
	ACDC	AC and DC power supplies
	ACR	Redundant (dual) AC PS
	DC	Single 48V DC power supply
	24VDC*	Single 24V DC power supply
	DCR	Redundant (dual) DC PS
	DDC	Dual feed DC power supply
	24VR*	Redundant (dual) 24V DC PS
Temperature Range	Default	0 to +50°C
	H	Temperature hardened (-40 to +65°C)
	N	NEBS F2B airflow (0 to +55°C)
	HN	NEBS F2B airflow, hardened (0 to +65°C)
Timing Options	Default	No timing
	G	Integrated GNNS, PTP, SyncE
	PTP	PTP 1588v2 timing and SyncE
Special Option	Default	None
	DRC	Dry contacts

**North American market only*

Notes:

The following is relevant for ETX-2i-10G/8SFPP and ETX-2i-10G-B/8SFPP only (including the ODU option):

- *Power Supply = DDC is not yet available*
- *Optional GNSS*

ETX-2i-10G, ETX-2i-10G-B

Ethernet Business and Cell-Site Gateways

Data Sheet

SUPPLIED ACCESSORIES

AC power cord (with indoor AC models)

DC connector kit PLUG-DC/TB-S/J (with indoor DC models)

The following accessories are for ETX-2i-10G/8SFPP/ODU, ETX-2i-10G-B/8SFPP/ODU:

Seven blank plugs (PN: WJ-DM-16-VPA) for sealing unused SFPP cable glands.

One blank plug (PN: 28788_7) for sealing protection of unused AC or DC power connector when only one power supply is assembled.

Safety bracket for preventing power cord pullout.

Cable ties (two per PS cable).

Circular 4-pin female AC power connector plug (PN: 2440_04_T09CB_T) per AC power module.

Circular 3-pin female DC power connector plug (PN: 2440_03_T09CB_T) per DC power module

For the relevant mounting kits, refer to the **Mounting Kits** table.

OPTIONAL ACCESSORIES

CBL-MUSB-DB9F

Mini USB cable to DB9 Female to connect ETX-2i-10G/4SFPP, ETX-2i-10G-B/4SFPP to a serial port.

CBL-UUSB-DB9F
Micro USB cable to DB9 Female to connect ETX-2i-10G/8SFPP, ETX-2i-10G-B/8SFPP to a serial port.

CBL-UUSB-DB9F
Micro USB cable to DB9 Female to connect ETX-2i-10G/8SFPP, ETX-2i-10G-B/8SFPP to a serial port.

CBL-RJ45/D9/F/6FT
RJ-45 cable to DB9 Female to connect ETX-2i-10G/8SFPP/ODU, ETX-2i-10G-B/8SFPP/ODU to a serial port.

CBL-ETX-2i-10G-ODU-AC
AC power cord for AC powered outdoor (ODU) units.

CBL-ETX-2I-10G-ODU-DC
DC connector kit for DC powered outdoor (ODU) units.

Power Supplies

ETX-2i-10G-PS/AC (for both ETX-2i-10G and ETX-2i-10G-B)

ETX-2i-10G-PS/DC (for both ETX-2i-10G and ETX-2i-10G-B)

ETX-2i-10G-PS/24VDC (for both ETX-2i-10G and ETX-2i-10G-B)*

ETX-2i-10G-B-PS/H/AC/ODU (for both ETX-2i-10G and ETX-2i-10G-B Outdoor units)

ETX-2i-10G-B-PS/H/DC/ODU (for both ETX-2i-10G and ETX-2i-10G-B Outdoor units)

**North American market only*

For ordering options of mounting kits, see the **Mounting Kits** table.

Table 4. Mounting Kits

Product	19" Rack	Wall/H-Frame	Pole
8.5-inch Indoor Enclosures	RM-35/P1 – one unit RM-35/P2 – two units	WM-35	
19-inch Indoor Enclosures	RM-34 (supplied)	WM-34	
Outdoor Enclosures		WM-35-ODU/45 (DC) WM-35-ODU/45/H (AC/DC) WM-35-ODU/P/45 (DC) WM-35-ODU/P/45/H (AC/DC)	WM-35-ODU/P/45 (DC) WM-35-ODU/P/45/H (AC/DC)

International Headquarters
24 Raoul Wallenberg St., Tel Aviv 6971920, Israel
Tel/Fax 972-52-4748272 | Fax 972-3-6498250
Email **market@rad.com**

North American Headquarters
900 Corporate Drive, Mahwah, NJ 07430, USA
Tel 201-529-1100 | Toll Free: 800-444-7234 | Fax: 201-529-5777
Email **market@radusa.com**

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