

ETX-2i (1G devices)

IP and Carrier Ethernet Demarcation with D-NFV



- Feature-rich demarcation and aggregation suite, offering a complete Service Assured Access (SAA) solution, line rate Layer-3 services, and vCPE applications
- Ideal for service providers, wholesalers, and mobile operators, seeking to deliver and monitor SLA-based MEF-certified CE 2.0, Layer-3 VPN, and TDM over PSN
- Versatile offering of Ethernet over fiber, SHDSL, VDSL, GPON, PDH, and TDM, assuring unified service delivery over any access technology
- TWAMP and Layer-2 OAM, diagnostics for scalable and accurate traffic monitoring, quick fault detection, and troubleshooting of Layer-2 and Layer-3 networks

FLEXIBLE SERVICE DELIVERY AND ASSURANCE AT 1G

The ETX-2i IP and Carrier Ethernet Demarcation with D-NFV device is the main component of RAD's Service Assured Access solution, providing:

- Ethernet service uniformity over multiple access technologies including GbE, SHDSL, VDSL, PDH, and SONET/SDH
- Operation in diverse topologies including ring, daisy chain, and hub and spoke
- PW functionality for mobile backhauling and business services
- Synchronization for mobile 2G, 3G, LTE, and LTE-A backhauling networks
- Network Function Virtualization (NFV) for vCPE solutions

ETX-2i is offered in a variety of product options: ETX-2i, ETX-2i-B, ETX-2i-10G, and ETX-2i-100G. (Details on ETX-2i 10G devices and ETX-2i 100G devices can be found in dedicated data sheets.)

ETX-2i is a next-generation hybrid L2 and L3 demarcation device. The ETX-2i-B branch office device is an optimized access box adapted to the requirements of next-generation vCPE networks.

The tables below provide further information on the capabilities offered by the ETX-2i and ETX-2i-B devices.

MARKET SEGMENTS AND APPLICATIONS

ETX-2i is 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

The ETX-2i family features and services are standard based and can work with any 3rd party equipment using standard based features and services.

NETWORK TOPOLOGIES

ETX-2i supports 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 incorporates a complete set of CE 2.0-certified Ethernet service tools that allow service providers to distinguish between high- and low-priority traffic and optimize TCP sessions.

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

It supports advanced scheduling, WRED per CoS, shaping per EVC, with flexible classification rules and access lists.

DHCP Snooping

ETX-2i supports DHCP Snooping with Option 82 for protection of DHCP transactions.

Layer-2 Control Processing

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

MEF Services

ETX-2i delivers 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.



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VCPE

ETX-2i and ETX-2i-B leverage Network Functions Virtualization (NFV), allowing carriers to provide a vCPE solution in various models, including Centralized and Decentralized architectures. This solution reduces CAPEX and OPEX by eliminating the physical appliance required for hosting network functions.

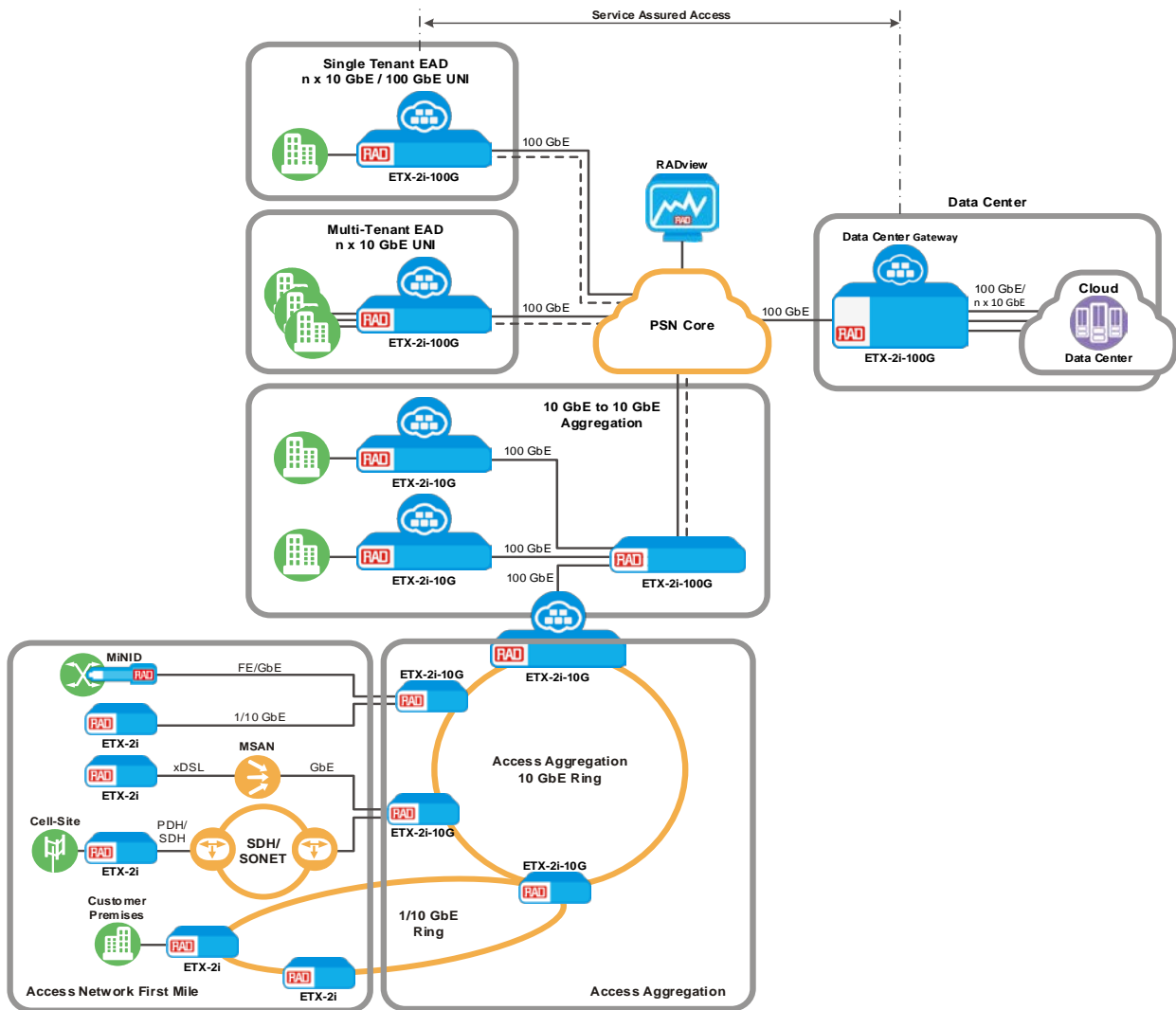
The D-NFV options allow for seamless insertion of x86 cards as optional modules. The D-NFV module hosts virtual machines providing virtual network functions (VFs) or value-added service capabilities. This enables service providers to quickly and easily provide new services and implement new network capabilities, with the benefit of function localization at the customer premises.

ROUTING

ETX-2i and ETX-2i-B models with enabled routing offer Virtual Routing and Forwarding (VRF) instances, allowing service providers to deploy Layer-2 and Layer-3 VPNs. The forwarding engine capability ranges from 1 to 8 Gbps, allowing Carrier Ethernet and IP services to be offered in a single device providing high-capacity performance monitoring, network function virtualization (NFV), and more.

ETHERNET OVER IP/GRE

ETX-2i and ETX-2i-B models with enabled routing offer Ethernet over IP/GRE tunneling, allowing service providers to extend Layer-2 services to out of footprint sites over IP transport.



Access Aggregation with SLA-Based Services

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SDN READY MANAGEMENT

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

Security features include SNMPv3, RADIUS (client authentication), TACACS+ (client authentication, authorization, and accounting), SSH, and SFTP.

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

NETCONF/YANG

XML-based network configuration protocol NETCONF is supported and provides an easy interface for NFV/SDN orchestrators to install, manipulate, and delete the configuration of ETX-2i.

Zero Touch

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

TDM PSEUDOWIRE

ETX-2i 64E1 and ETX-2i/ETX-2i-B with smart SFP (MiTOP) provide pseudowire (PWE) services. The PWs can be encapsulated using CESoPSN per IETF RFC 5086 or SAToP per IETF RFC 4553.

ETHERNET OVER PDH

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

- Generic Framing Procedure (GFP G.7041)
- GFP or 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 offers fast protection for virtually any kind of failure, in any linear, ring, or dual-homed topology. The device employs IEEE 802.3ad link aggregation (1:1 LAG), 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.

It also provides MSTP and RSTP (IEEE 802.1Q) to support loop-free bridge forwarding over mesh or ring physical topology.

Table 1. Interfaces

| Specifications | ETX-2i Fixed Ports  | ETX-2i 64E1  | ETX-2i/M & D-NFV  | ETX-2i-B  | ETX-2i-B D-NFV  |
|-----------------------------|--|--|--|---|---|
| FE/GbE SFP | 8 SFP/UTP combo | 6 SFP/UTP combo | 4 (2 additional with GbE module) SFP/UTP combo | 4, 6 or 10 SFP/UTP combo Port 1 SFP only | 6 SFP (Ports 1 and 2)/copper (Ports 3 to 6) RJ-45 |
| Network interface module | – | – | + | – | – |
| D-NFV | – | – | 19V ordering option | V ordering option | + |
| E1/T1/T3 | – | 64 TDM PW E1/T1 ports | 4/8 EoPDH E1/T1 network ports | – | – |
| Router (embedded) | + (8G) | + (8G) | + (8G) | + (4G) | +(4G) |
| SHDSL module | – | – | + | – | – |
| VDSL2 module | – | – | + | – | – |
| E1/T1/T3/STM-1/OC3 EoPDH | Via integrated Smart SFP (MiRiC) | | | | |
| E1/T1/T3 PW services | Via integrated Smart SFP (MiTOP) | | | | |
| Timing | 2 MHz, 2 Mbps, 1PPS, ToD | – | 2 MHz, 2 Mbps, 1PPS, ToD (excluding D-NFV option) | 2 MHz, 2 Mbps, 1PPS, ToD | – |

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

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TIMING AND SYNCHRONIZATION

ETX-2i incorporates 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 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 also supports ordinary clock (OC), boundary clock (BC), and transparent clock (TC), as well as a dual master operating simultaneously in G.8265.1 and G.8275.1 modes. ETX-2i utilizes the best master clock algorithm (BMCA) to select the best clock from the ports that are provisioned as slave.

MONITORING AND DIAGNOSTICS

Featuring multi-layer OAM and PM tools, ETX-2i offers 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 and also 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 size. 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 supports digital diagnostics monitoring (DDM) SFP functions according to SFF-8472, excluding external DDM calibration.

Service Activation Tests

The ETX-2i family offers service activation tools with multiple RFC-2544, Y.1564, and L3 SAT testers.






VIRTUALIZATION ARCHITECTURE

The ETX-2i and ETX-2i-B D-NFV options are provided with RAD's vCPE-OS software platform on their D-NFV modules.

D-NFV module is a Linux based, carrier-class operating system for vCPE applications, with open management interfaces. vCPE-OS runs on any white box server and can be preloaded in RAD's virtual CPE (vCPE) platforms. It combines powerful networking capabilities with virtualization for hosting SD-WAN and any other value-added virtual network function (VNF) applications from multiple vendors.

For more information on vCPE-OS, please refer to the vCPE-OS datasheet.

Table 2. Timing and Synchronization

| Specifications | ETX-2i Fixed Ports  | ETX-2i 64E1  | ETX-2i/M & D-NFV  | ETX-2i-B  | ETX-2i-B D-NFV  |
|---|--|--|--|--|--|
| 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 | TC | | OC, TC, BC Slave clock (excluding D-NFV option) | TC |
| PTP ports | ToD/1PPS (RJ-45), External clock (CONN.COAX SMA), 1PPS (CONN.COAX SMA), 2M (SMA) | - | | ToD/1PPS (RJ-45), External clock (CONN.COAX SMA), 1PPS (CONN.COAX SMA), 2M (SMA) (excluding D-NFV option) | - |
| Station clock | Balanced E1, unbalanced E1 (via adapter cable); RJ-45 connector | - | | Balanced E1, unbalanced E1 (via adapter cable); RJ-45 connector (excluding D-NFV option) | - |
| SyncE recovery from PDH module to Ethernet ports | + | - | | + | - |
| Synchronous Ethernet (SyncE), eSYNCE | ITU-T G.8261-G.8264 | - | | ITU-T G.8261-G.8264 (excluding D-NFV option) | - |

Specifications

E1/T1 INTERFACES (TDM PSEUDOWIRE)

(ETX-2i 64E1 with built-in TDM PWE E1/T1 ports)

| | |
|------------------------------|--|
| Number of Ports | 64 |
| Compliance | E1: G.703 T1: ANSI T1.101, ANSI T1.403 |
| Data Rate | E1: 2.048 Mbps T1: 1.544 Mbps |
| Line Coding | E1: HDB3 T1: B8ZS |
| Framing | E1: Framed (G.732N with or without CRC) Framed with CAS (G.732S with or without CRC) Unframed T1: Unframed or ESF |
| Impedance | E1: 120Ω, balanced 75Ω, unbalanced (via adapter cable) T1: 100Ω, balanced |
| Connectors | Electrical, RJ-45 |
| Payload Encapsulation | CESoPSN, SAToP |
| Network Encapsulation | MEF 8, UDP/IP |

ENVIRONMENTAL

| | |
|------------------------------|--|
| Storage Temperature | -40 to 85°C (-40 to 185°F) |
| Operating Temperature | Regular: 0 to 50°C (32 to 122°F): ETX-2i -5 to 55°C (23 to 131°F): ETX-2i-B Temperature hardened: -40 to 65°C (-40 to 149°F): ETX-2i -20 to 65°C (-4 to 149°F): ETX-2i-B w/ 10 ports (2U) A single SFP-30H is supported at temperature up to 62°C. |

| | |
|-----------------|---------------------------|
| Humidity | 5% to 90%, non-condensing |
|-----------------|---------------------------|

PHYSICAL

| | |
|----------------------------|--|
| 8.5-inch Enclosures | Height: 43.7 mm (1.7 in) ETX-2i-B 2U: 88.2 mm (3.5 in) Width: ETX-2i - 215.5 mm (8.5 in) ETX-2i-B - 220 mm (8.7 in) Depth: ETX-2i - 300 mm (11.8 in) ETX-2i-B - 170 mm (6.7 in) ETX-2i-B/D-NFV - 280 mm (11 in) Weight: ETX-2i/M - 2.16 kg (4.76 lb) maximum M (module): 0.91 kg (2.01 lb) ETX-2i-B 1U - 0.7 kg (1.54 lb) ETX-2i-B 2U - 1.34 kg (2.95 lb) ETX-2i-B/DNFV - 2.01 kg (4.4 lb) (Module: 0.91 kg (2.01 lb)) |
| 19-inch Enclosures | Height: All devices except ETX-2i 64E1 - 43.7 mm (1.7 in) ETX-2i 64E1 - 132.7 mm (5.2 in) Width: 440 mm (17.4 in) Depth: 240 mm (9.5 in) ETX-2i/M - 300 mm (11.8 in) ETX-2i/D-NFV - 350 mm (13.78 in) Weight: ETX-2i Fixed Ports - 3.6 kg (7.9 lb) maximum ETX-2i 64E1 - 7.15 kg (15.87 lb) maximum ETX-2i/M module: 0.91 kg (2.01 lb) |

RESILIENCY

| | |
|---------------------------------|---|
| Dual Homing | Dual homed link redundancy |
| Ethernet Path Protection | G.8031 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 LAG with load balancing |

Table 3. Power

| Specifications | ETX-2i Fixed Ports | ETX-2i 64E1 | ETX-2i/M & D-NFV | ETX-2i-B | ETX-2i-B D-NFV |
|-------------------------|--|-----------------------------------|--|----------|----------------|
| Power Supply | AC: 100-240 VAC (-10%, +6%), 50/60 Hz, 0.9A DC: 48 VDC (40-60 VDC), 2A ETX-2i, ETX-2i-B 8.5" – Dual DC feed ETX-2i-B - Wide-range AC/DC with auto detection | | | | |
| Power Supply Redundancy | + | + | + | + | - |
| Power Consumption | Non-modular product base (8 GbE): 35W max | AC PS: 74W max; DC PS: 60W max | Modular base: 30W Modular uplink: 5W max VDSL: 10W max D-NFV: 30W | 23W | 30W |

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IP ADDRESSING AND ROUTING

| | |
|-----------------------------|---|
| Addressing | IPv4 and IPv6 |
| Rate | ETX-2i-B: Up to 4 Gbps ETX-2i: Up to 8 Gbps |
| Routing Protocols | Dynamic routing: OSPFv2, BGPv4, VRRPv2, and VRRPv3 Static routing Bidirectional forwarding detection (IP-BFD single hop) for fast path failure detection and fast route propagation Ethernet over IP/GRE tunneling |
| Routing Technologies | Static Policy-based VRF (10), RIF (32) |
| NAT | Static/dynamic NAPT/NAT |
| DHCP | Client, server, relay IP helper addresses |
| DNS | Server |

NETWORKING CAPABILITIES

| | |
|----------------------------------|--|
| Services | Ethernet E-LAN, E-Tree, E-Access 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 | Per port 5-tuple ACL |
| Policing | Color aware/unaware dual token bucket with user-configurable CIR + CBS and 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 |
| Scheduling | 8 × CoS per EVC scheduling elements Strict Priority (SP) Weighted Fair Queue (WFQ) |
| Shaping | Per EVC Per EVC.CoS |

DIAGNOSTICS

| | |
|---|--|
| Alarm Relay (optional) | Type: Dry contacts with three “in” Connector: Terminal block, 9-pin |
| Connectivity Fault Management (CFM) | Per IEEE 802.1ag |
| EFM Link-fault OAM | IEEE 802.3ah |
| Link-level OAM | Per IEEE 802.3-2005 |
| Counters | RMON2 port-level counters |
| Delay and Loss Measurements | Per MEF 36 |
| ICMP Echo | Over L2 and L3 services Tests IP connectivity (PING) |
| KPI Measurements | Accurate one-way KPI measurements |
| 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 | RFC 5357 TWAMP light generator and responder (SW license) ITU-T Y.1731 PM (SLM; DM) RFC 5618 TWAMP responder and receiver TWAMP sender PM Controller (PMC) |

| | |
|---------------------|--|
| GENERAL | |
| Compliance | MEF 3.0 CE 2.0 MEF 6 (E-Line – EPL and EVPL, E-LAN – EPLAN and EVPLAN) 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 |

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BRIDGE

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

MANAGEMENT AND SECURITY

| | |
|-------------------------------|--|
| 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 Dual Stack IPv4 and IPv6 routing IP forwarding 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 |
| Format | Asynchronous |
| Data rate | 9.6, 19.2, or 115.2 kbps |

Ethernet Management Port

| | |
|------------------|-------------------|
| Type | 10/100/1000BASE-T |
| Connector | RJ-45 |

ETX-2i

IP and Carrier Ethernet Demarcation with D-NFV

Ordering

<product>/?/@/\$/#/+/&/~/%

| | | |
|----|---------------------------------|---|
| ? | Temperature Range | Regular |
| | | H Temperature hardened |
| | | HN NEBS compliant, temperature-hardened |
| | | N NEBS compliant |
| @ | Power Supply | |
| | | AC AC power supply |
| | | ACDC Dual AC and DC power supplies |
| | | DCHP High power DC power supply for D-NFV and non D-NFV |
| | | ACHP High power AC power supply for D-NFV |
| | | ACR Dual AC power supply |
| | | DC DC power supply |
| | | DCR Dual DC power supply |
| | | DDC Dual DC feed power supply |
| | | WR Wide range |
| \$ | Enclosure size (inches)/Modular | |
| | | 19" 19" 1U metal box (ETX-2i) |
| | | M 8.5" modular uplink (ETX-2i) |
| | | V 8.5" with D-NFV module slot (ETX-2i-B) |
| | | 19V 19" with D-NFV module slot (ETX-2i) |
| + | 64E1T1 64 E1/T1 ports (ETX-2i) | |
| | DRC 2 IN dry contacts | |
| ~ | Timing Options | |
| | | SYE SyncE |
| | | PTP 1588v2 timing and SyncE |

RECOMMENDED CONFIGURATIONS

Note: For temperature-hardened options, use SFPs with maximum operating temperature 85°C (185°F).

ETX-2i:

ETX-2i/AC/19

ETX-2i/AC/M

ETX-2i/DDC/M/PTP

ETX-2i/H/AC/19/PTP

ETX-2i/H/ACR/19/PTP

ETX-2i/HN/AC/19/PTP

ETX-2i/N/ACHP/19V

ETX-2i/H/AC/M/VDL8W/POTS

ETX-2i/H/AC/M/VDL8W/ISDN

ETX-2i/DC/19/64E1T1/SYE

ETX-DNFV-M/?/*/&/^

D-NFV modules based on Xeon D (for **ETX-2i**)

| | | |
|---|-----------------------------------|-------------------------|
| ? | Intel® processor name and # cores | |
| | | X4C Xeon D with 4 Cores |
| | | X8C Xeon D with 8 Cores |
| * | SSD Solid state drive rate | |
| | | 128S 128 GB |
| | | 256S 256 GB |
| ^ | RAM | |

| | |
|-----|-----------|
| 16R | 16 GB RAM |
| 24R | 24 GB RAM |

ETX-DNFV-M/X4C/128S/16R

ETX-DNFV-M/X8C/256S/24R

ETX-M/?/^

Ethernet network uplink module

| | |
|---|--|
| ? | Uplink module ports (Default = no uplink module) |
| | 2ETH Eth uplink module with 2 combo ports |

ETX-M/2ETH

Note: Any ETX-2i with D-NFV option must be ordered together with a RADcare Package and RADcare Project Assurance Package.

ETX-2i-B:

ETX-2i-B/WR/2SFP/2CMB

ETX-2i-B/WR/2SFP/2CMB/DRC

ETX-2i-B/WR/2SFP/4UTP

ETX-2i-B/H/WR/2SFP/8SFP

Note: Although this device option has ten active ports, processing capability is limited to six GbE.

ETX-2i-B/AC/V/2SFP/4UTP

ETX-2i-B/DDC/V/2SFP/4UTP

ETX-DNFV-M/?/*/&/^

D-NFV modules based on Intel® Atom Rangeley (for ETX-2i-B)

| | | |
|----|---|-----------------------|
| ? | Intel® Atom Rangeley model processor name and # cores | |
| | | R4C C2558 4-core |
| | | R8C C2758 8-core |
| | | BLNK Blank |
| * | SSD Solid state drive rate | |
| | | 128S 128 GB |
| ^ | RAM | |
| | | 8R 8 GB RAM |
| | | 16R 16 GB RAM |
| \$ | Acceleration | |
| | | ACC DPDK acceleration |

ETX-DNFV-M/R4C/128S/8R

ETX-DNFV-M/R4C/128S/8R/ACC

ETX-DNFV-M/R8C/128S/8R

ETX-DNFV-M/R8C/128S/8R/ACC

ETX-DNFV-M/R8C/128S/16R

ETX-DNFV-M/R8C/128S/16R/ACC

ETX-DNFV-M/BLNK

SPECIAL CONFIGURATIONS

Please contact your local RAD partner for additional configuration options

SOFTWARE LICENSES

ETX-2-SW TWAMP

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

SUPPLIED ACCESSORIES

- AC power cord (with AC models)
 - DC connector kit PLUG-DC/TB-S/J (for ETX-2i DC models)
 - DC connector kit PLUG-DC-MC1/BS for ETX-2i-B DC DNFV option
- See the **Mounting Kits** table.

OPTIONAL ACCESSORIES

CBL-MUSB-DB9F

Mini USB cable to connect device to a serial port

ETX-2i-PS/!/^

Extractable power supply for ETX-2i/64E1

| | | |
|---|----------------------------------|-----------------------------------|
| ! | Power supply | |
| | AC | Single AC power supply |
| | DC | Single DC power supply |
| | ACHP | Single high power AC power supply |
| ^ | E1 ports (Default = no E1 ports) | |
| | 64 | ETX-2i-64E1 |

ETX-2i-PS/DC/64

DC PS, 64E1T1 device

ETX-2i-PS/AC/64

100-240 VAC, 64E1T1 device

ETX-2i-PS/ACHP

High-power AC power supply for ETX-2i/DNFV

SFP-GPON-1DH

GPON optical network terminal SFP

See the **Mounting Kits** table.

Table 4. Mounting Kits

| Product | 19" Rack | Wall |
|-------------------------|--|-------------|
| ETX-2i (8.5") | RM-35/P1 – one unit RM-35/P2 – two units | WM-35 |
| ETX-2i (19") | RM-34 (supplied) – one unit | WM-34 |
| ETX-2i-64E1 (19" 3U) | RM-52 (supplied) – one unit without cable management CM-52 – one unit with cable management | - |
| ETX-2i-DNFV (19") | RM-34 (supplied) – one unit | - |
| ETX-2i-B (8.5") | RM-35/P1 – one unit RM-35/P2 – two units | WM-35-TYPE4 |
| ETX-2i-B 2U (8.5" 2U) | RM-54/A – one unit RM-54/A2 – two units | - |
| ETX-2i-B-DNFV (8.5") | RM-35/P1 – one unit RM-35/P2 – two units | WM-35 |

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