CXR-iNET

INTELLIGENT NETWORK ELEMENT MANAGEMENT SYSTEM (EMS)

Features

- Web based application following design of thin client computing
- Windows style user desktop environment
- Supported browsers: Firefox, Google Chrome, and Microsoft Edge (Chromium-based)
- Supported server platform: MS Windows
- Database server: MySQL RDBMS
- Multi-language support (upon request)
- Geographic redundancy for business continuity and disaster recovery that supports auto/manual failover including data replication
- System access security with role-based user access control. The access privilege can be customized through any combination of operation functions and managed NEs. User inherits privileges automatically from group privilege
- System operation and user access log
- Multi-hierarchical subnet structure allows user to provide multi-level network topology display
- SNMP based management system that supports SNMPv1, v2 and v3 including the functions in configuration, alarms, and statistics gathering on network elements. Other protocol support includes ICMP, NTP, and Syslog.
- Up to 100,000 Network Elements (NEs) and unlimited concurrent user connection logged into the iNET server
- Network elements of same model with different versions managed by iNET simultaneously
- Scheduled statistics reports can be displayed and saved in MS Excel/PDF format.
- Enriched network topology management view provides zoom-in/zoom-out, point-and-click and drag-and-drop capabilities including NEs/links alarm and connectivity status
- Alarm management that provides automatic suppressing and notification via Email with advanced filtering system
- Build-in system monitoring and NE connectivity tool with NE connectivity status for system administration purpose
- Robust and reliable design based on distributed system architecture which provides flexible and scalable solution for network expansions.
- Performance management shows current statistics for the NEs and system
- Advanced optional functions:
  - Ethernet connectivity fault management (eCFM)
  - Graphical Cross-connection Tool (GXC)
  - Packet Transport Network Circuit Tool (PTNCKT)
  - TDM Circuit Marker (TDMCKT)
  - Currently Active Alarm Summary (CAAS)
  - System Redundancy for Disaster Recovery (DR)
  - File Transfer (FT) supporting NAT configuration
  - North Bound Interface: v1/v2c/v3 (NBI)
  - Trend Grapher (TG)
  - Loopback/BERT tool (DGN)
  - Security Management (SEC)

Description

CXR-iNET, based on the scalable and modularized architecture, is a set of intelligent network management software programs which can be taken as both Element Management Layer (EML) and Network Management Layer (NML) based the Telecommunications Management Network (TMN) model. This program is flexibly designed to manage your network regardless of size or complexity. You can add or remove any component as you want without affecting operations of the system. It provides a GUI (graphical user interface) for the management of a communications network containing CXR products.
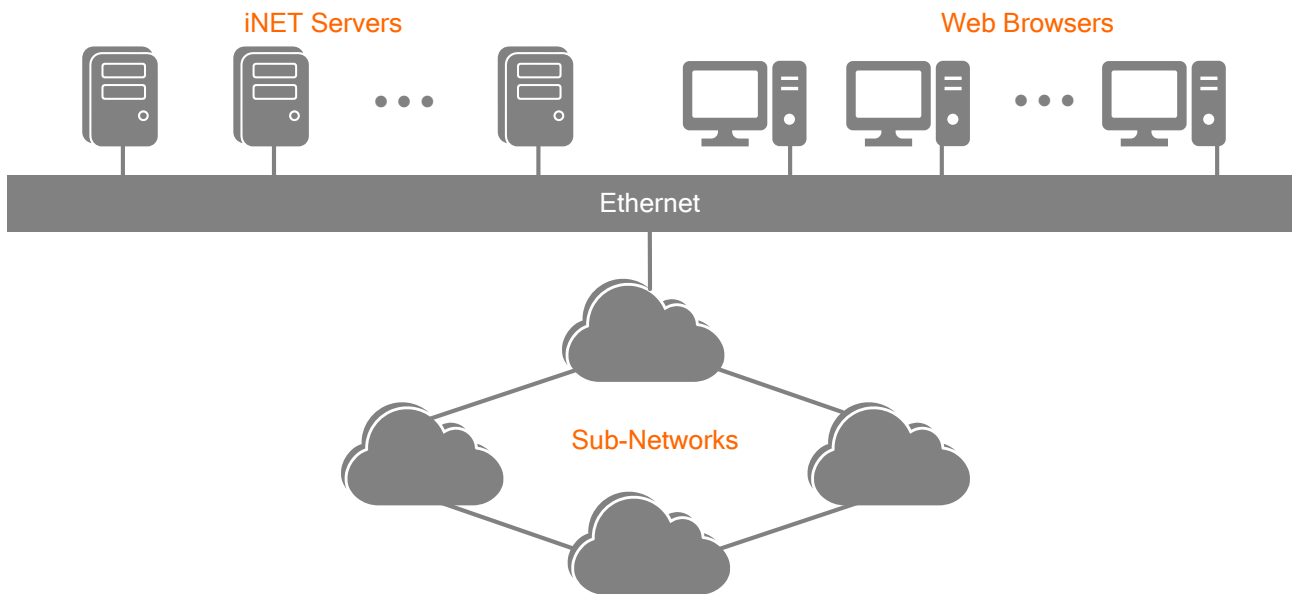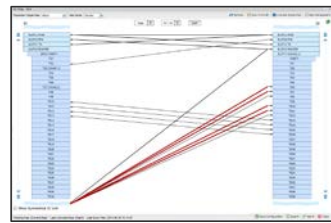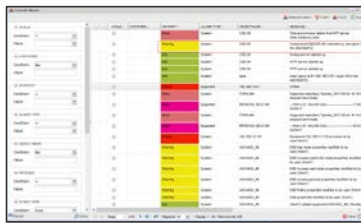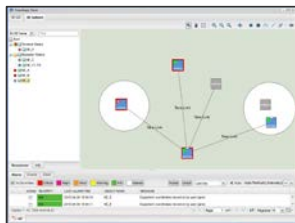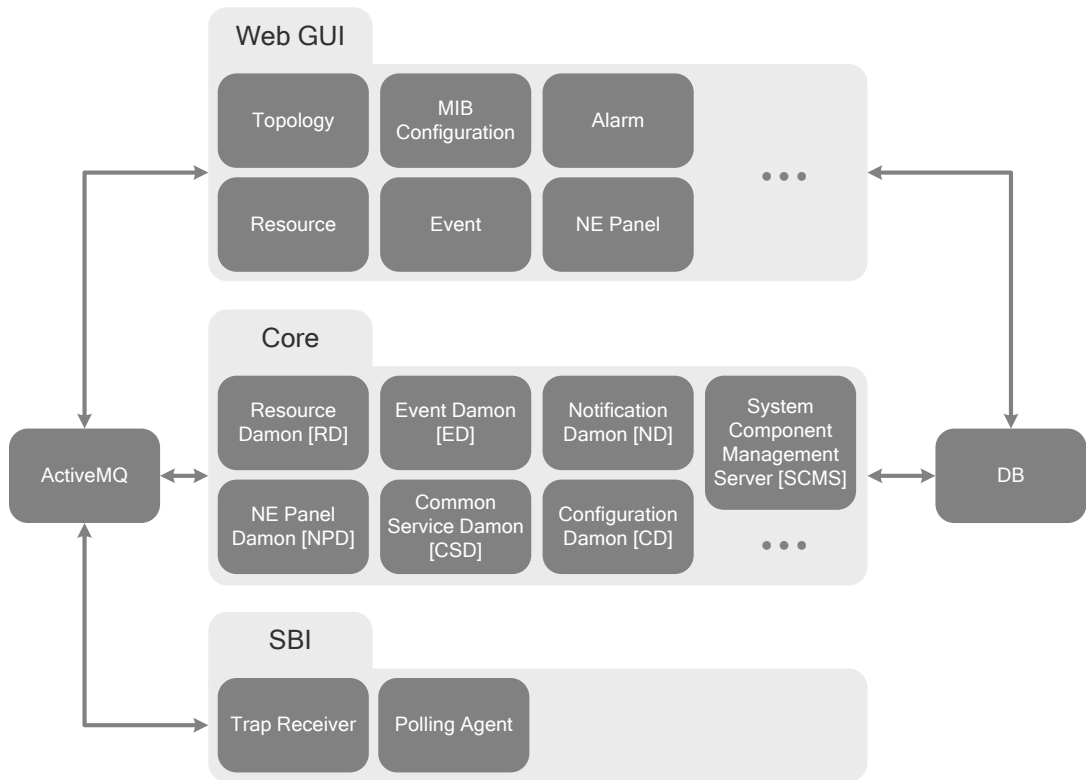
The workforce management is facilitated by the multiple levels of login security, which provides the network manager great flexibility of work assignment. The hierarchical grouping feature, cities, buildings, and rooms, allow rapid access to the desired network element.

All SNMP provided functions are available in CXR-iNET. This includes the execution of all commands, the gathering of all statistics, and the display of all alarm conditions in real time. The map and the reports can be printed as well as viewed directly from the iNET.

By offering feature-rich functionalities, CXR-iNET maximizes the network efficiency, minimizes the operating costs and reduces the potential risks. Moreover, it supports the protocols of SNMP, NTP, and more (upon request). Customization adaptation into different protocols is allowed and upon request.

CXR-iNET Architecture

Web GUI

| Topology | MIB Configuration | Alarm | . . . |
| Resource | Event | NE Panel | |

Core

| Resource Damon [RD] | Event Damon [ED] | Notification Damon [ND] | System Component Management Server [SCMS] |
| NE Panel Damon [NPD] | Common Service Damon [CSD] | Configuration Damon [CD] | . . . |

ActiveMQ

DB

SBI

| Trap Receiver | Polling Agent |

iNET Servers

Web Browsers

Ethernet

Sub-Networks

CXR-iNET Main Functions

- **Topology Management**
  - Offers topology view for:
    - NE/Subnet topology
    - Panel view of equipment (NE)
    - Resource tree
    - MIB tree
  - Supports zooming in and zooming out of topology views
  - Allows users to create, update and delete Nes and links in network topology, and store them into the database.
  - Offers drag-and-drop approach for a user to create an NE icon
  - Port-level topology link
  - LLDP/SLLDP link auto-discovery

- **NE GIS View**
  - Manages physical NE locations
  - Built-in geographic GIS map based on OpenStreetMap (OSM)

- **NE/LINK Auto-Discovery Management**
  - Manages multiple discovery agents
  - Discovers non-SNMP equipment
  - Supports IPv4/v6
  - Supports SNMPv1/v2c/v3
  - Supports LLDP/SLLDP

- **Configuration Management**
  - Provides remote control on NE's configuration
  - General parameters setting
  - Provides MIB based monitoring and setting on NE, including diagnosis and performance.

- **Alarm Management**
  - System/NE alarm/event monitoring including SFP network interface module status collection and threshold alarm setting
  - Alarm filtering
  - Alarm display
  - Alarm history
  - Alarm notification via email or SMS
  - Configurable alarm audio

- **User & Security Management**
  - Add, delete, and modify system user or user group account
  - Password authentication including complexity setting for password construction
  - Role based authorization with user definable user privileges and access control based on user job functions and network resources that need to be managed
  - User operations and access log
  - Multi-condition queries on user operation/access log with searching criteria
- **iNET Self-Management**
  - Supports real-time monitoring on iNET software processes
  - Supports real-time monitoring on NE connectivity
  - Supports database backup and recovery
  - Provides date and time synchronization between iNET and NE
  - Provides cloud disk to share files over the network

CXR-iNET Advanced Optional Components

- **System Redundancy and Protection**
  - Disaster Recovery (DR) Solution
    - Provides geographical system redundancy and an independent system on each site
    - DR status monitoring
    - Automatic and configurable database synchronization between redundant sites
    - Automatic or manual switchover based on hot-standby/warm-standby mechanism

- **Graphical Cross-Connection Tool**
  - NE-Level Cross Connect Configuration
  - Provides equipment cross-connect creation/deletion/display views.
  - Supports Normal/SNCP/ULSR cross-connection types

- **eCFM(Ethernet Demarcation Device Connectivity Fault Management) Tool**
  - Point-to-Point diagnosis for supported IP based devices
  - Supports VPLS and Hub/Spoke modes

- **File Transfer**
  - Configuration upload/download
  - Firmware download

- **Currently Active Alarm Summary(CAAS)**
  - Display Equipment CAAS by different severities
  - Query CAAS information based on query conditions

  Note: This function is available on some selected CXR products supporting CAAS function as listed in iNET User's Manual.

- **North Bound Interface(NBI)**
  - Supports SNMP v1/v2c/v3 NBI for alarms integration with upstream operations support system
  - Other NBI components are available upon request and additional NRE costs are per-project based. Please contact CXR sales representatives for details.

- **Trend Grapher**
  - Real-time data traffic monitoring
  - Trend report for performance management in simple and clean graphics

- **Threshold**
  - Set threshold for alarm triggering
  - Support TG sensor setting for now

- **TDM Circuit Management**
  - Supports TDM circuit manager
    - PDH normal circuit creation, deletion, query, modification, route discovery and route table export (Including cross-connection creation/deletion)
    - PDH protected (including FOM 1+1 linear protection, PDH ULSR ring protection and PDH SNCP ring protection) circuit deletion, query, modification, route discovery and route table export (Not including cross-connection creation/deletion)
    - SDH/SONET normal/protected (SNCP/UPSR ring protection) circuit deletion, query, modification, route discovery and route table export (Not including cross-connection creation/deletion)
    - PDH and SDH/SONET normal/protected (including FOM 1+1 linear protection, PDH ULSR ring protection, PDH SNCP ring protection and SNCP/UPSR ring protection) hybrid circuit deletion, query, modification, route discovery and route table export (Not including cross-connection creation/deletion)

- **PTN Circuit Management**
  - As part of the management solution for CXR pseudowire products to provide emulated Ethernet services over a packet-switching network (PSN).
  - Provide service provisioning function to CXR PTN solutions including circuit creation, deletion, modification, and discovery

- **TDM Diagnostics Management**
  - Graphical Loopback/BERT test tool
  - Port level diagnostics
  - Topolink level diagnostics

Third-party System Hardware

Note 1: Hardware system shall be provided by local SI or end-customer.

Note 2: This recommendation list below is the minimum system hardware requirement and it is for reference only. Please consult with a CXR representative for precise hardware spec and quantities.

- **Hardware Specifications for iNET Server**

Item	Descriptions
Typical Application	For all numbers of NEs
Processor	Intel Xeon® E5-2600 series v2 or above
Memory	16GB or above
Hard disk	160GB/7200rpm or above
DVD R/W	(Optional) DVD ROM
NIC	10/100/1000M
Graphics	GeForce 600 Series or above
Mouse	USB Wheel or Optical Mouse

- **Hardware Specifications for iNET Client**

Item	Descriptions
Typical Application	For all numbers of NEs
Processor	Intel Core i5 2.4 GHz or above
Memory	8GB or above
Hard disk	160GB/7200rpm or above
DVD R/W	DVD ROM
Sound card & Speaker	Sound Interface and Speakers
NIC	10/100/1000M
Graphics	GeForce 600 Series or above
Mouse	USB Wheel or Optical Mouse
Monitor	(Laptop) 14" diagonal LED / (PC) 24" LCD monitor with 1024*768 or above
Web Browser	Firefox / Google Chrome / Microsoft Edge

Third-party System Software

■ Software Specifications for iNET Server

Item	Descriptions
Operating System	Windows Server 2012 R2 Foundation/Essentials/Standard Windows Server 2016 Foundation/Essentials/Standard Windows Server 2019 Windows Server 2022 Windows 10 Professional Windows 11 Professional
Java Platform	OpenJDK Version 11.0.25
Database	MySQL Version 8.4.3
Web Server	Tomcat Version 9.0.98
Message Server	ActiveMQ Version 5.18.6

■ Software Specifications for iNET Client

Item	Descriptions
Operating System	Windows 10 Professional, Windows 11 Professional Windows Server 2012 Windows Server 2016 Windows Server 2019, Windows Server 2022
Browser	Firefox (V52 Extend Support Release (ESR), V130~134) Google Chrome (V127~131) Microsoft Edge Chromium-based (V127~131)

Associated Management System Standards

■ Standards

ITU-T M.3010—Principles for a telecommunications management network
ITU-T M.3100—Generic Network Information Model.
ITU-T M.3200—TMN Management Service: Overview.
ITU-T M.3400—Management Functions

CXR-iNET Ordering Information

To order the CXR-iNET products, you must select maximum one iNET Server, the number of iNET Concurrent User License (s), and other option (such as NE management license) you would like to purchase. If you already have an iNET Server Software and need an upgrade on it, leave the Server Software off of your order form and simply list the option(s) you require and provide CXR with the serial number of the iNET product you have already purchased.

■ iNET Server Software
Please select the iNET Server Software if desired. If you're purchasing additional options, such as NE license, for your existing iNET Server, leave this off of the order form.

iNET Server	Description
CXR-iNET-Server-Lite5	CXR-iNET Server Software Lite5 Edition. When Lite5 Edition is purchased, the iNET system can manage a Network Scale of up to 5 NEs at maximum.
CXR-iNET-Server-Lite10	CXR-iNET Server Software Lite10 Edition. When Lite10 Edition is purchased, the iNET system can manage a Network Scale of up to 10 NEs at maximum.
CXR-iNET-Server-Lite20	CXR-iNET Server Software Lite20 Edition.

	When Lite20 Edition is purchased, the iNET system can manage a Network Scale of up to 20 NEs at maximum.
CXR-iNET-Server-Standard	CXR-iNET Server Software Standard Edition. When Standard Edition is purchased, the iNET system can manage a Network Scale of up to 100 NEs at maximum.
CXR-iNET-Server-Professional	CXR-iNET Server Software Professional Edition. When Professional Edition is purchased, the iNET system can manage a Network Scale of up to 2000 NEs at maximum.
CXR-iNET-Server-Enterprise	CXR-iNET Server Software Enterprise Edition. When Enterprise Edition is purchased, the iNET system can manage a Network Scale of up to unlimited number of NEs.

Notes

- Server software license includes basic functions such as alarm monitoring, SNMP based configuration including diagnosis, performance and reports, and does NOT include server hardware, and installation services.

- All server software editions don't include any NE management licenses, that need to be purchased additionally.

■ iNET Concurrent User Software License

Please specify the number of concurrent user licenses you will be serving.

GUI Clients	Description	Notes
CXR-iNET-User	Each CXR-iNET concurrent user license, not including Windows OS, MS Excel, and H/W	Please order number of iNET concurrent user license(s) required.

■ iNET DR Software License

Please Select the Disaster Recovery (Redundancy) Control Software if desired.   If DR is not desired, leave it off of the order form.

iNET DR Software	Description	Notes
CXR-iNET-DR	CXR-iNET DR (Disaster Recovery) Software license for each physical server. This DR software is in charge of redundancy status monitoring, database replication, and load balancing, system failover and recovery.	• To order this item, user needs to purchase one additional copy of iNET Server Software. • Each physical server requires a license.

■ NE Configuration Tool Options

■ Graphical Cross-connection Tool Software License

iNET GXC Tool	Description	Notes
CXR-iNET-GXC-QX3430	Graphical Cross connection tool for QX3430	QX3430 supported
CXR-iNET-GXC-QX3440	Graphical Cross connection tool for QX3440	QX3440-A/B/C/D supported
CXR-iNET-GXC-IP6704A	Graphical Cross connection tool for IP6704A	IP6704A, IP6704A-DACS supported
CXR-iNET-GXC-HX9150	Graphical Cross connection tool for HX9150SA	HX9150SA supported
CXR-iNET-GXC-HX9170	Graphical Cross connection tool for HX9170S	HX9170S supported
CXR-iNET-GXC-HX9400R	Graphical Cross connection tool for HX9400R	HX9400R-CC4/CC16/PTN supported Please note that HX9400R-CC16 device with FW/MIB V1.25.01 does not support Dual-home GXC
CXR-iNET-GXC-HX9500R	Graphical Cross connection tool for HX9500R	HX9500R-CC4/CC16/PTN supported
CXR-iNET-GXC-HX9550	Graphical Cross connection tool for HX9550	HX9550-CGA/CGC/ CGD supported

- **Circuit Software License**

iNET TDM Circuit Management	Description	Notes
CXR-iNET-TDMCKT-QX3440	TDM Circuit Manager for QX3440 including GXC configuration tool software License by default.	QX3440-A/C/D/E supported
CXR-iNET-TDMCKT-HX9800R	TDM Circuit Manager for HX9800R including GXC configuration tool software License by default.	HX9800R supported
CXR-iNET-TDMCKT-HX9400R	TDM Circuit Manager for HX9400R including GXC configuration tool software License by default.	HX9400R-CC4 and HX9400R-PTN supported
CXR-iNET-TDMCKT-HX9500R	TDM Circuit Manager for HX9500R including GXC configuration tool software License by default.	HX9500R-CC4 and HX9500R-PTN supported

iNET PTN Circuit Management	Description	Notes
CXR-iNET-PTN-G7820	License of PTN Circuit Management for G7820.	G7820-24S and G7820-48T supported
CXR-iNET-PTN-PT7860	License of PTN Circuit Management for PT7860 including GXC configuration tool software License for PTN/TDM hybrid application.	PT7860A supported
CXR-iNET-PTN-QX3440	License of PTN Circuit Management for QX3440 including pseudo-wire, and GXC configuration tool software License	Supported QX3440 sub-models: CHA/CHC/CHD-CCPA, CHEA CHPAa/CHPCa-CCPB-2GEa CHPAa/CHPCa-CCPB-DCSa
CXR-iNET-PTN-IP6704A	License of PTN Circuit Management for IP6704A including GXC configuration tool software License for PTN/TDM hybrid application.	IP6704A and IP6704A-DACS supported
CXR-iNET-PTN-HX9400R	License of PTN Circuit Management for HX9400R including GXC configuration tool software License.	HX9400R-PTN (CCPA Controller) supported
CXR-iNET-PTN-HX9500R	License of PTN Circuit Management for HX9500R including GXC configuration tool software License.	HX9500R-PTN (CCPA Controller) supported
CXR-iNET-PTN-HX9800R	License of PTN Circuit Management for HX9800R including GXC configuration tool software License.	HX9800R-PTN (CCPA Controller) supported

- **Diagnostics Software License**

iNET Diagnostics Management	Description	Notes
CXR-iNET-DGN-QX3440	Support Loopback/BERT tool for QX3440	QX3440-A/B/C/D supported
CXR-iNET-DGN-HX9400R	Support Loopback/BERT tool for HX9400R	HX9400R-CC4/CC16/PTN supported
CXR-iNET-DGN-HX9500R	Support Loopback/BERT tool for HX9500R	HX9500R-CC4/CC16/PTN supported
CXR-iNET-DGN-HX9550	Support Loopback/BERT tool for HX9550	HX9550A supported
CXR-iNET-DGN-WDM1800	Support Loopback/BERT tool for WDM1800	WDM1800-CHAa/CHBa supported
CXR-iNET-DGN-HX9150	Support Loopback/BERT tool for HX9150	HX9150SA supported
CXR-iNET-DGN-PT7860	Support Loopback/BERT tool for G7860	G7860A supported
CXR-iNET-DGN-HX9170	Support Loopback/BERT tool for HX9170	HX9170S supported

■ iNET Feature Options

Please specify which iNET types you need. You may choose any or all of the available features.

iNET Features	Description	Notes
CXR-iNET-FT	Upload configuration Download configuration/firmware	File transfer function only supports selected products, please contact your nearest CXR sales representative
CXR-iNET-CAAS	Currently Active Alarm Summary	CAAS function only supports selected products, please contact your nearest CXR sales representative
CXR-iNET-NBI-ALARM	Northbound Interface compliant with SNMP v1/v2c/v3 including pre-defined SNMP/MIB Alarm support for: 1) Alarm traps 2) Current alarm table(s) 3) History alarms table(s)	All Alarm objects are coming with pre-defined properties and format. Any change or modification request on this is subject to additional NRE charge. Please contact your nearest CXR sales representative for more details.
CXR-iNET-NBI-INVENTORY	Northbound Interface compliant with SNMP v1/v2c/v3 including pre-defined SNMP/MIB Inventory/Resource support for: 1) NE table(s) 2) Plug-in card table(s) 3) Port table(s)	All Inventory objects are coming with pre-defined properties and format. Any change or modification request on this is subject to additional NRE charge. Please contact your nearest CXR sales representative for more details.
CXR-iNET-NBI-PERFORMANCE *	Northbound Interface compliant with SNMP v1/v2c including pre-defined SNMP/MIB Performance support for: 1) NE Port Task based	All Performance objects are coming with pre-defined properties and format. Any change or modification request on this is subject to additional NRE charge. Please contact your nearest CXR sales representative for more details.
CXR-iNET-TG	Trend Grapher shows trend report in simple and clear graphics for performance management	
CXR-iNET-THR	- Threshold allows setting for alarm triggering.	Please contact your nearest CXR sales representative for more details.
CXR-iNET-SEC	Advanced features in security management.	Radius authentication supported
CXR-iNET-NRE	NRE charges for special customization per project basis - Special Feature Development - 3rd-party Equipment Management Integration into iNET - Other North Bound Interface (NBI) components - Language Support - Customized report Customized GUI	Where "**os**" are defined in tables below. Please contact your nearest CXR sales representative for more details.

■ iNET NE Management Licenses

iNET offers two NE management license schemes as a customer option: FIXED LICENSE or FLOATING LICENSE*.

FIXED LICENSE: Each network element (NE) managed by iNET needs to have a valid NE license. The total number of NE licenses required is the sum of numbers of NE for each NE type.

FLOATING LICENSE: NE management license is calculated based on the "Counting Point (CP)" of each NE type. An entry point of CP=100 (CXR-iNET-FLCP100) is mandatory for each new iNET system. Additional CP points can be purchased on a 100CP basis based on your actual need. Please be noted, it is not allowed to switch back to fixed license scheme once you decide to swap from fix license scheme to floating license scheme.

Language Support: EN (English), SC (Simplified Chinese) or TC (Traditional Chinese)

NE Management License Scheme		
Fixed License		**Floating License**
Part Number	**Description**	**Counting Point (CP) per NE type**
CXR-iNET-QX3430	Each QX3430 Major NE management license (EN)	4
CXR-iNET-QX3440-CHA	Each QX3440-CHA Major NE management license (EN, TC)	13
CXR-iNET-QX3440-CHA-CCPA	Each QX3440-CHA-CCPA Major NE management license (EN)	14
CXR-iNET-QX3440-CHC	Each QX3440-CHC Major NE management license (EN, TC)	10
CXR-iNET-QX3440-CHC-CCPA	Each QX3440-CHC-CCPA Major NE management license (EN)	11
CXR-iNET-QX3440-CHD	Each QX3440-CHD Major NE management license (EN)	8
CXR-iNET-QX3440-CHD-CCPA	Each QX3440-CHD-CCPA Major NE management license (EN)	9
CXR-iNET-QX3440-CHEA	Each QX3440-CHEA Major NE management license (EN)	7
CXR-iNET-QX3440-CHEB*	Each QX3440-CHEB Major NE management license (EN)	11
CXR-iNET-QX3440-CHPAa-CCPB-8GEHSWa*	Each QX3440-CHPAa/CCPB-8GEHSWa Major NE management license (EN)	19
CXR-iNET-QX3440-CHPAa-CCPB-2GEa	Each QX3440-CHPAa/CCPB-2GEa Major NE management license (EN)	17
CXR-iNET-QX3440-CHPAa-CCPB-DCSa	Each QX3440-CHPAa/CCPB-DCSa Major NE management license (EN)	16
CXR-iNET-QX3440-CHPCa-CCPB-2GEa	Each QX3440-CHPCa/CCPB-2GEa Major NE management license (EN)	12
CXR-iNET-QX3440-CHPCa-CCPB-DCSa	Each QX3440-CHPCa/CCPB-DCSa Major NE management license (EN)	11
CXR-iNET-QX3440-CHPDa-CCPB-2GEa*	Each QX3440-CHPDa/CCPB-2GEa Major NE management license (EN)	9
CXR-iNET-QX3440-CHPDa-CCPB-DCSa*	Each QX3440-CHPDa/CCPB-DCSa Major NE management license (EN)	8
CXR-iNET-HX9500R-CC4	Each HX9500R-CC4 Major NE management license (EN)	23
CXR-iNET-HX9500R-CC16	Each HX9500R-CC16 Major NE management license(EN)	25
CXR-iNET-HX9500R-PTN	Each HX9500R-PTN Major NE management license(EN)	29
CXR-iNET-HX9550-CGA	Each HX9550-CGA Major NE management license (EN)	18
CXR-iNET-HX9550-CGD	Each HX9550-CGD Major NE management license (EN)	9
CXR-iNET-MemberNE	Each member NE management license for stacking or cascading	5
CXR-iNET-RemoteNE	Each Indirectly Managed Equipment (IME) management license (See the table below)	2
CXR-iNET-3rdNE	Each 3rd Party NE management license	5
CXR-iNET-FLCP100	Each floating license stores 100 Counting Point value as a minimum purchase base.	100

■ iNET Software Maintenance Agreement (SMA)

Purchase of the 1st year SMA is mandatory.   Please specify how many years of iNET SMA you desire to purchase. The iNET software upgrade/patches on existing functionality are only available within the maintenance period purchased.

Note: Software maintenance packages are available only in yearly basis starting from date of purchase of iNET. The price quoted for the new SMA applies only before the expiration of the current SMA.

iNET SMA Type	Description
CXR-iNET-SMA-5	Standard annual SMA for a network scale up to 5 NEs at maximum
CXR-iNET-SMA-10	Standard annual SMA for a network scale up to 10 NEs at maximum
CXR-iNET-SMA-20	Standard annual SMA for a network scale up to 20 NEs at maximum
CXR-iNET-SMA-Standard	Standard annual SMA for a network scale up to 100 NEs at maximum
CXR-iNET-SMA-Professional	Standard annual SMA for a network scale up to 2000 NEs at maximum
CXR-iNET-SMA-Enterprise	Standard annual SMA for a network scale with unlimited number of NEs
CXR-iNET-SMAG-5	Annual SMA Gold for a network scale up to 5 NEs at maximum
CXR-iNET-SMAG-10	Annual SMA Gold for a network scale up to 10 NEs at maximum
CXR-iNET-SMAG-20	Annual SMA Gold for a network scale up to 20 NEs at maximum
CXR-iNET-SMAG-Standard	Annual SMA Gold for a network scale up to 100 NEs at maximum
CXR-iNET-SMAG-Professional	Annual SMA Gold for a network scale up to 2,000 NEs at maximum
CXR-iNET-SMAG-Enterprise	Annual SMA Gold for a network scale with unlimited number of NEs
CXR-iNET-RSMA	Annual reinstatement for the iNET system, which SMA gets expired.

Notes

- Scope of SMA:

    - Access to software patches/upgrade, including feature enhancements and major new versions.

    - Standard SMA: 5x8 (Monday through Friday from 9:00am to 5:00pm, GMT+8) field problem remote diagnosis and consulting via e-mail, phone call and IMs (e.g., WhatsApp)

    - SMA Gold: 7x24 e-mail consulting, real-time consulting via phone call and IMs (e.g., WhatsApp) and field problem remote diagnosis

    - Remote commencement of software patching

- Purchase of the 1st year SMA is mandatory. Please order the number of years of SMA you want to cover.

- SMA will cover CXR-iNET Software only, and will not cover problems in system hardware, operating system platform, network condition or viruses.

- New purchase of iNET components and services will NOT reinstate the expired SMA automatically.

- All remote support activities, if purchased, are made possible through remote supporting tools, such as VPN or remote desktop (e.g., AnyDesk). It is the end customer's responsibility to provide all necessary remote access connections and tools and maintain stable connections at the customer side.

- Customer with existing iNET running shall renew/reinstate any expired SMA before making any new order of iNET software components and services.

- If the purchased SMA has expired, you need to extend the maintenance service by renewing/reinstating your SMA and purchasing RSMA for all prior unpaid year(s) and new years to come.

Please contact your sales representative for any network scale change that needs an update on SMA.

■ Accessories

User's Manual	
CXR-iNET-UM	User's Manual (paper copy).
	Note: A CD version of the manual is already included as standard package.

■ **Ordering Example**

Ordered Item	Quantity	Notes
CXR-iNET-Server-Enterprise	1	English Version; Maximum is 1
CXR-iNET-User	2	Fill in the number of concurrent user licenses required (2 concurrent user licenses in the case for example)
CXR-iNET-FT	1	File Transfer management 1
CXR-iNET-QX3440	50	NE Management License of 50 QX3440
CXR-iNET-SMA-standard	1	First year of annual software maintenance agreement service provided by CXR

Smart Solutions for Smart Networks