# QUANTUM RUGGED 1570R SECURITY GATEWAYS

## Secure. Rugged. Simple.

Check Point Quantum Rugged appliances ensure industrial sites, manufacturing floors and mobile fleets are connected and secure. The solid-state design of the 1570R operates in temperatures ranging from minus 40° C to 75° C, making it ideal for securing any industrial application — power and manufacturing plants, oil and gas facilities, maritime fleets, building management systems, and more. Connect your field devices to the 1570R via an 8 port LAN switch or Wi-Fi and in turn connect your 1570R to OT management networks via 1 GbE copper or fiber WAN port or a highly available dual SIM LTE modem. The Check Point NGFW in the 1570R ensures the connection is secure.

| Transportation | Oil & Gas | Manufacturing | Energy | Utilities |

## SECURE SCADA AND ICS ENVIRONMENTS

The Check Point Quantum Rugged 1570R Next Generation Firewall (NGFW) secures Critical Infrastructure and Industrial Control Systems (ICS) without impacting operations. Our NGFWs identify and secure over 70 standard and proprietary SCADA (Supervisory Control and Data Acquisition) and ICS protocols. This includes the most popular protocols used in Utilities and Energy sectors, Manufacturing sectors, Building Management Systems and IoT (Internet of Things) devices.

## NETWORK RELIABILITY

The 1570R Next Generation Firewall feature set ensures your remote sites stay connected and secure. Deploy the 1570R in Layer 3 routed mode or in Layer 2 bridge mode. Set up site-to-site VPN and client-to-site VPNs to protect data in transit and restrict access to designated personnel. Finally the dynamic routing suite enables the 1570R to fit seamlessly into existing large scale networks.

## RUGGED FORM FACTOR

The rugged solid-state form factor enables the 1570R to operate in a temperature range of -40C to +75C, making it ideal for deployment in harsh environments. The 1570R is certified for the industrial specifications IEEE 1613 and IEC 61850-3 for heat, vibration, and immunity to electromagnetic interference (EMI). In addition, the 1570R is certified for maritime operation per IEC-60945 and IACS E10 and complies with DNV-GL-CG-0339.

## HIGHLY AVAILABLE HARDWARE

The small desktop form factor 1570R mounts on walls or on DIN rails from the back or bottom. Connecting redundant power supplies is supported, ensuring continuous operation in case one power source fails. For added redundancy, two 1570R firewalls can be deployed in a High Availability cluster. The dual SIM LTE modem ensures the 1570R stays connected to operational management networks.

# SPOTLIGHT ON SECURITY

## Advanced security, uncompromising performance

The Check Point 1570R is the rugged member of the 1500 Security Appliance family that delivers enterprise-grade security in a series of simple and affordable, all-in-one security gateways to protect branch office employees, networks and data from cyber-theft. These security appliances include a comprehensive security suite and the latest R80 software for SMB appliances.



**Comprehensive Protection**

- ❖ Next Generation Firewall
- ❖ Site-to-Site VPN
- ❖ Remote Access VPN
- ❖ Application Control and Web Filtering
- ❖ IoT Device Recognition
- ❖ Intrusion Prevention (IPS)
- ❖ Antivirus
- ❖ Anti-Bot
- ❖ SandBlast Threat Emulation (sandboxing)



**IT/OT Network Segmentation**

Check Point Next-Generation Firewalls provide boundary protection between IT and OT networks and micro-segmentation among product lines and departments on the shop floor. With granular visibility into over 1,400 SCADA protocols and commands, these firewalls provide access control throughout the entire OT environment.

**Virtual Patching**

Protect unpatched ICS systems from known exploits. Automatically activate security protections against known CVEs by installing the appropriate IPS signatures on the gateways. This allows effective protection against unpatched systems or systems running on legacy operating systems and software; without disrupting critical processes and business operations.

## ICS/SCADA Protocol Support

BACNet, CIP, DNP3, IEC-60870-5-104, IEC 60870-6 (ICCP), IEC 61850, MMS, ModBus, OPC DA & UA, Profinet, Step7 (Siemens) and more; 1400+ in all. See the full list at appwiki.checkpoint.com.

## 1570R Performance Highlights

| VPN | Firewall | NGFW[1] | Threat Prevention[2] |
|---|---|---|---|
| 1,100 Mbps | 1,900 Mbps | 700 Mbps | 400 Mbps |

1: Includes Firewall, Application Control, IPS. 2: Includes Firewall, Application Control, URL Filtering, IPS, Antivirus, Anti-Bot, sandboxing

## SPOTLIGHT ON HARDWARE

### Reliable, Rugged, Always Available

The solid-state 1570R has no moving parts like disks or fans, enabling it to operate in environments with extreme temperatures and is certified for industrial applications. The embedded LTE modem dual SIM functionality in the 1570R enables automatic fail over between SIMs and has a peak download rate of 300 Mbps and an uplink rate of 50 Mbps.

**Wi-Fi with Embedded 3/4G/LTE**

LTE is an essential component of any enterprise wireless WAN, either as a primary or failover link connecting fixed remote sites or a mobile fleet of vehicles. The 1570R embedded 3/4G/LTE modem supports:

- CAT6
- Dual SIM: nano and micro
- LTE antennas: 1x main, 1x diversity
- Global coverage

**Network Interfaces**

LAN Switch:  8x 10/100/1000Base-T RJ45 ports
WAN Interface:  1x 10/100/1000Base-T RJ45 or 1GbE SFP
DMZ Interface:  1x 10/100/1000Base-T RJ45 or 1GbE SFP

**Certified to Operate in Harsh Conditions**

Industrial: IEEE 1613 , IEC 61850-3 , IEC 60945, EN/IEC 60529, heat and immunity to electromagnetic interference
Rugged: EN/IEC 60529 , IEC 60068-2-27 shock, IEC 60068-2-6 vibration
Maritime: IEC-60945 B, IACS E10:1991 , DNV-GL 2.4 , DNV-GL-CG-0339, IEC 61162-460
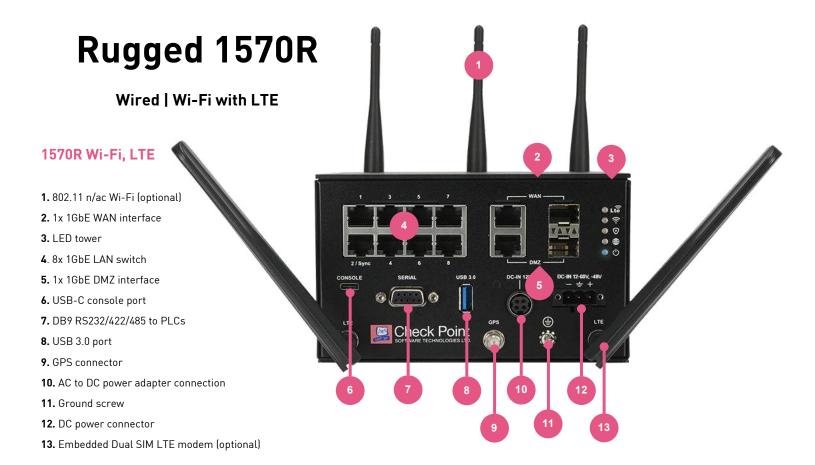Operating Temperature Range: -40ºC ~ 75ºC (-40ºF ~ 167ºF)
IP (Ingress Protection) Rating: IP30

**Additional Ports**

Console Acess: 1x USB-C
USB Port:  1x USB 3.0 for deployment or firmware installs
SD Card:  Micro-SD slot to extend local logging
Serial DB9: supports RS232 (RS422, R485 ready)

# Rugged 1570R

## Wired | Wi-Fi with LTE

**1570R Wi-Fi, LTE**

1. 802.11 n/ac Wi-Fi (optional)
2. 1x 1GbE WAN interface
3. LED tower
4. 8x 1GbE LAN switch
5. 1x 1GbE DMZ interface
6. USB-C console port
7. DB9 RS232/422/485 to PLCs
8. USB 3.0 port
9. GPS connector
10. AC to DC power adapter connection
11. Ground screw
12. DC power connector
13. Embedded Dual SIM LTE modem (optional)

# SPOTLIGHT ON MANAGEMENT

## Lower the complexity of managing your security

Setup can be done in minutes using pre-defined security policies and our step-by-step configuration wizard. If you have tens or hundreds of gateways to deploy, save additional time using the Zero-touch Deployment service. Security is manageable locally via a Web interface or centrally with a cloud-based Check Point Security Management Portal (SMP) or R80 Security Management. If you're on the go, monitor your 1500 security gateways using the handy WatchTower app available on iOS and Android.

**Zero-touch Deployment, Central Management**
An intuitive web-based user interface, enables large enterprises to provision security efficiently. Apply a template to your inventory of new security gateways. The template specifies common device configuration settings and readies the gateway for central security management. When powered on Check Point gateways get their configuration from the cloud and are ready for a security policy.

## Cyber security management for Industrial IoT (IIoT)

Check Point offers the industry's most comprehensive cyber-security solution for different IoT environments, including Smart Office, Smart Building, Industrial, and Healthcare. The solution enables organizations to prevent IoT related attacks and minimize their IoT attack surface. All in a way that is easily scalable and non-disruptive to critical processes.

### BENEFITS
- Instantly secure all your existing IoT devices and safely implement new ones.
- Cut down security man-hours with automated detection and remediation of threats.
- Keep critical processes undisrupted with adaptive policies and no need to physically patch devices.

### CAPABILITIES
**IoT Risk Analysis:** Check Point Security Management integrates with leading IIoT discovery vendors who use the Check Point IoT API. Import discovered objects from the IIoT discovery vendor. Objects are classified based on their risk level. The solution continually performs a comprehensive risk analysis to expose all the risks associated with your devices.

**Auto-Segmentation:** Minimize risk exposure with auto-generated IoT policies. Save time manual creating the IoT security policy and ensure IoT devices are secure from the moment they connect to your network. The solution automatically generates and enforces a policy for every device. Policies that allow only authorized access to (and from) IoT devices and ensure devices only use communication protocols they were designed to use.

| Source | Destination | Service & Application | Action |
|---|---|---|---|
| Function=HMI | Function=PLC | Any | From HMI |
| Manufacture=Dell | Manufacture =Risco | Modbus Protocol | Accepted |

**SmartConsole Policy Automatically Generated by IoT Vendor using the IoT API**

**Threat Prevention:** Block known and unknown IoT related attacks with virtual patching. The IoT import can also include a CVE assessment of the imported IoT object so that a threat prevention policy can be applied. This protects vulnerable devices against known malicious exploits with the appropriate IPS signatures on the Check Point security gateways.

# 1570R SPECIFICATIONS

| | 1570R |
|---|---|
| **Enterprise Testing Conditions** | |
| Threat Prevention (Mbps) [1] | 400 |
| Next Generation Firewall (Mbps) [2] | 700 |
| IPS Throughput (Mbps) | 770 |
| Firewall Throughput (Mbps) | 1,900 |
| **RFC 3511, 2544, 2647, 1242 Performance (LAB)** | |
| Firewall 1518 Byte UDP Packets (Mbps) | 4,000 |
| VPN AES-128 Throughput (Mbps) | 1,100 |
| Connections per Second | 13,500 |
| Concurrent Connections | 500,000 |
| **Software** | |
| Security | Firewall, VPN, User Awareness, QoS, Application Control, URL Filtering, IPS, Anti-Bot, Antivirus and SandBlast Threat Emulation (sandboxing) |
| Unicast, Multicast Routing | OSPFv2, BGPv4 and 4++, RIP, PIM (SM, DM, SSM), IGMP |
| IPv6 | local network and internet connections, dual stack tunneling IPv4 over IPv6 networks, prefix delegation |
| Mobile Access License (Users) | 200 remote SNX or Mobile VPN client users |
| Protocols | Over 70 protocols, including the most popular in the industry: Modbus, Bacnet, CIP, S7, IEC-104, DNP3 and many more |
| **Hardware** | |
| WAN Port | 1x 10/100/1000Base-T RJ-45 / 1x 1000BaseF SFP port (transceiver not included) |
| DMZ Port | 1x 10/100/1000Base-T RJ-45 / 1x 1000BaseF SFP port (transceiver not included) |
| LAN Ports | 8x 10/100/1000Base-T RJ-45 ports |
| Wi-Fi (optional) | 802.11 n/ac MIMO 3x3 |
| Radio Band (association rate) | One radio band non-concurrent: 2.4GHz (max 450 Mbps) or 5GHz (max 1,300 Mbps) |
| 3/4G/LTE (optional) | 3/4G/LTE Embedded modem, CAT6 with Main and Auxiliary antennas |
| SIM (optional) | Dual SIM (Nano and Micro) |
| Console Port | 1x USB-C |
| USB Port | 1x USB 3.0 |
| SD Card Slot | Micro-SD slot |
| Serial Port | 1x DB9 female connector, supports RS232 serial protocols, (RS422, R485 ready) |
| **Dimensions** | |
| Enclosure | Desktop, wall mount, DIN rail (bottom and back mount options) |
| Dimensions (W x D x H) | 150 x 150 x 90 mm, 5.9 x 5.9 x 3.5 in. |
| Weight | 1.8 kg (3.0 lbs.) |
| **Environment** | |
| Operating | -40ºC ~ 75ºC (-40ºF ~ +167ºF) |
| Storage | -45ºC ~ 60ºC, (-49ºF ~ 140ºF), 5~95%, non-condensing |
| **Power Requirements** | |
| Power Redundancy | Supported |
| Power Adapter AC Input | 110 – 240VAC, 50 – 60 Hz, AC socket IEC 320-C14 Type |
| Power Adapter Options | 12V/3.3A 40W commercial (0º ~ 40ºC, 32º ~ 104ºF) power adapter or 12V/10A 120W industrial grade (-40º ~ 70ºC, -40º ~ 158ºF) power adapter |
| DC Input (3-pin terminal) | Nominal 12 to 60VDC, -48VDC, Maximum Range 10.2VDC to 72VDC |
| Power Consumption (Max) | Wired: 25.1W, Wi-Fi-LTE: 30.7W |
| Heat Dissipation | Wired: 85.6 BTU/hr., Wi-Fi-LTE: 104.8 BTU/hr. |
| **MTBF** | |
| DC Input (@ 25ºC) | 268.8 years |
| AC Input, Industrial-grade  (@ 25ºC) | 30.2 years |

1. Includes Firewall, Application Control, URL Filtering, IPS, Antivirus, Anti-Bot, SandBlast Zero-Day Protection 2. Includes Firewall, Application Control, IPS

# 1570R SPECIFICATIONS (continued)

| Certifications[1] | |
| --- | --- |
| Safety | CB, IEC 60950, UL 60950, 62368, UL 62368 |
| Emissions | CE, UL/c-UL 62368-1,CE, EN 55024, EN 55032, EN 61000-3, EN 61000-4 IEC 62368-1 CB / EMC, EN55032 Class B, VCCI, AS, NZS CISPR 32, IC ICES 03, RSS247, FCC: Part 15 Class B,C,E |
| Environment | RoHS, REACH, WEEE |
| Industrial Certifications | IEEE 1613 , IEC 61850-3 , IEC 60945, EN/IEC 60529 |
| Rugged Certifications | EN/IEC 60529 , IEC 60068-2-27 shock, IEC 60068-2-6 vibration |
| Maritime | IEC-60945 B, IACS E10:1991 , DNV-GL 2.4 , DNV-GL-CG-0339, IEC 61162-460 |
| IP Rating | IP30 |
| Cellular | PTCRB, GCF and Carriers AT&T and Verizon certified |

[1] Maritime certifications are in progress

# ORDERING THE 1570 RUGGED

| SECURITY APPLIANCE [1] | |
| --- | --- |
| 1570R Ruggedized Next Generation Appliance with Industrial AC power supply | CPAP-SG1570R-SNBT-AC |
| 1570R Ruggedized Next Generation Appliance with DC power | CPAP-SG1570R-SNBT-DC |
| 1570R Wireless LTE Ruggedized Next Generation Appliance with Industrial AC power supply | CPAP- SG1570RWLTE-xx-SNBT-AC |
| 1570R Wireless LTE Ruggedized Next Generation Appliance with DC power | CPAP- SG1570RWLTE-xx-SNBT-DC |
| **WI-FI REGIONS (replace –xx in the SKU to specify the Wi-Fi region)** | |
| USA, Canada | change –xx to -US |
| Europe | change –xx to -EU |
| Japan | change –xx to -JP |
| Australia, Argentina | change –xx to -AU |
| Israel | change –xx to -IL |
| China | change –xx to -CN |
| India, Chile | change –xx to -IN |
| New Zealand | change –xx to -NZ |
| Latin America, Singapore, Hong Kong, Thailand, Sri-Lanka | change –xx to -LA |

[1] SKUs for 5 years are available; NGTP includes IPS, Application Control, URL Filtering, Antivirus, Anti-Bot, Anti-Spam; NGTX includes NGTP and Threat Emulation (sandboxing).

| ACCESSORIES | |
| --- | --- |
| SFP Short range transceiver (for the DMZ 1000BaseF port) | CPAC-TR-1SX |
| SFP Long range transceiver (for the DMZ 1000BaseF port) | CPAC-TR-1LX |
| SFP Short Range 100BaseF transceiver. compatible with 1570R appliance | CPAC-1500-TR-100BASE-FX |
| SD memory card 32 GB | CPAC-1500-32GB-SD |
| SD memory card 64 GB | CPAC-1500-64GB-SD |
| Replacement Wi-Fi Antenna (4 antennas) | CPAC-1500-WIFI-ANTENNA |
| Replacement LTE Antenna (1 piece) | CPAC-1590-LTE-ANTENNA |
| Industrial grade power adapter, 120W (-40º ~ 70ºC, -40º ~ 158ºF) | CPAC-1570R-PSU-IND |
| Commercial power adapter, 40W (0º ~ 40ºC, 32º ~ 104ºF) | CPAC-1570R-PSU-STD |
| Rack Mount shelf for Single/Dual for 1570R security gateways | SKU CPAC-1570R-RM-DUAL |