



# TEMPEST Level I USFF Workstation Gen 2

## Product Data

Model - DWT-109 (Level I)



API's second generation ultra small form factor (USFF) workstation delivers the latest performance and technology. It is a natural progression in API's suite of TEMPEST workstations. The DWT-109, Gen2 features 6th generation Intel i7 processor technology, offers space saving size and weight, and energy efficiency in its ultra small form factor size.

By combining high performance features with the proven industry leading design of API, this platform ensures support for future technologies, stability, expandability and security.

Featuring a slim optical drive and multiple high speed USB ports, it is equal in performance and capabilities to any leading-edge corporate business-class PC. Long life cycles with managed transitions facilitate extended deployments. This workstation is available with optional high resolution 23" LCD monitor.

The DWT-109 is currently in production. Please speak with an API Account Manager regarding more information.

## Features

- In process for certification to NSTISSAM TEMPEST/1-92 Level I and NATO SDIP-27 A standard (formerly AMSG 720B)
- Intel® Core™ i7-6700TE with Intel HD Graphics 530
- Ultra Small Form Factor
- Single or dual display port or fiber optic video interface for single or dual monitor support
- Removable Solid State Drives
- 8GB RAM upgradable to 32GB
- Up to 4 USB Ports
- Energy efficient
- Certified with a variety of peripheral options including headsets, webcam, PKI readers
- Industry leading three-year warranty



# TEMPEST Level I USFF Workstation Gen 2

## Specifications

Model - DWT-109 (Level I)

### Processor Options

Intel® Core™ i7-6700TE w ith Intel HD Graphics 530  
(2.4 GHz, up to 3.4 GHz w ith Intel Turbo  
Boost, 8 MB cache, 4 cores)

### Power

Autosensing power supply 100-240 VAC, 50/60Hz,  
AC cord  
Frequency.....50-60 Hz  
Max. Power.....85 Watt

### Available Options

#### Media Devices

DVD RW  
External PKI Card Reader (Optional)

#### Hard Drives

256 GB Removable Solid State Drive SATA 6.0 Gb/s,  
2.5"

#### Peripherals

DAT-602 video peripheral set (Postive disconnect  
switchbox, headset, webcam)  
DAT-105 ergo keyboard  
DAT-108 optional mouse  
DAT-700 and DAT106 card Readers  
DAT-604 webcam  
DAT-107 headset  
AL1-KB101 and AL1-KB100 keyboards

### Input/Output

Power plug  
Video (Display Port), 1x (modified DP interface)  
(optional fiber video, dual port)  
Mouse (USB), 1x, (D9)  
Four USB 4 x (D9)  
Keyboard (USB), 1x, (D9)

### Network

Single 100MB/s fiber network SC interface  
(Optional 1000MB/s LC)

### Physical Specifications

Height..... 8.25 inches (20.9 cm)  
Width ..... 3.5 inches (8/9 cm)  
Depth..... 9.5 inches (24 cm)  
Weight..... 5.5 lbs.

### Warranty

3-year on parts and labor

Advanced Programs, Inc. is an NSA-endorsed test services facility  
and an NSA-endorsed TEMPEST manufacturing facility.

Advanced Programs, Inc. is an ISO 9001:2018 certified facility Cert.  
#US-2683d-05

Technical Specifications are subject to change without notice. U.S.A.  
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# TEMPEST Level I Thin Client All-in-one

**Product Data**

Model - HL1-T640 (Level I)

## Description

API's HL1-T640 is the latest iteration of TEMPEST All-in-One Thin Client offering and the direct follow on from the widely successful HL1-T630. Boasting an all-in-one design for space efficiency, the HL1-T640 combines the power and performance of the HP® t640 Thin Client with a high definition business class 23 inch display to meet a wide range of user requirements in an easy to use and secure form factor. This attractive thin client delivers the best experience available on a TEMPEST thin computing platform. By employing the advanced AMD Ryzen multicore processor with Radeon Vega 3 graphics processing, the HL1-T640 client provides the best performance in its class. The HL1-T640 can be ordered with an optional embedded red/black KVM switch allowing for up to two TEMPEST displays, keyboard and mouse to access both the internal high and external low-side hosts for multi-domain environments where operating space is a premium. This is achieved by the secure TEMPEST Level1 thin client contained within and a low-side computer connected externally via the optional isolated KVM port. These integrated features greatly improve security through configuration control and eliminate the risks and vulnerabilities associated with the interconnection of equipment that has not been certified as a complete system. The HL1-T640 is one of many products from Advanced Programs, Inc. the largest supplier of TEMPEST equipment in the world with a comprehensive product suite covering all of your IT Infrastructure needs. The HL1-T640 meets NSTISSAM TEMPEST/1-92 Level I and NATO SDIP-27 A standards (formerly AMSS 720B).

## Features

- Certified to NSTISSAM TEMPEST/1-92 Level I and NATO SDIP-27 A standards
- Utilizes display port with high performance digital technology
- Optional Integrated Red/Black KVM Tempest Certified KVM switch
- Dual display capability
- Available operating systems: Windows 10 IOT Enterprise LTSC 2019. Also available with HP ThinPro, including HP / Smart Zero Core
- Latest AMD dual core processor for increased computing performance
- Memory: 8 GB DDR4 dual channel SDRAM standard, up to 32 GB
- Flash: 32 GB M.2 eMMC non-volatile flash module. Upgradable to 512GB M.2 NVMe
- Government approved integrated smart card reader that is field replaceable
- Industry leading three-year warranty





# TEMPEST Level I Thin Client All-in-One

**Specifications**  
Model - HL1-T640 (Level I)

## Processor

AMD Ryzen R1505G. CPU Frequency Max/Base; 3.3/2.4 GHz.  
Cores/Threads; 2/4. GPU Type; Radeon Vega 3. GPU Frequency 1000 MHz.  
Memory: 8 GB DDR4 dual channel SDRAM standard, up to 32 GB (field upgradable)  
Flash: 32 GB M.2 eMMC non-volatile flash module. Upgradable to 512GB M.2 NVMe

## Input/Output

Standard:  
USB mouse and keyboard ports  
One USB port  
One 100MB/s, SC duplex fiber network

## Optional Upgrades

Audio: Headphone and Mic in  
Video: External Display Port interface for dual monitor support; (API modified DP interface).  
KVM port to second host: Single port for second KVM channel interface to external host computer keyboard / mouse / video interfaces (See Secure KVM option)  
Network: 1,000mb/s LC

## Operating System

Standard: Windows 10 IoT Enterprise LTSC 2019.  
Optional: HP ThinPro, including HP /Smart Zero Core

## LCD Display

Viewable Size . . . . . 23 inch diagonal  
Pixel Pitch . . . . . 0.27mm  
Pixels Per Inch . . . . . 96 @ native resolution  
Brightness (typical) . . . . . 250 cd/m<sup>2</sup>  
Contrast Ratio (typical) . . . . . 1000:1 (25,000: dynamic)  
Viewing Angle (typical) . . . . . 170° Vert., 176° Hor.  
Response Time (typical) . . . . . Rapid Response (5ms)  
Display Colors . . . . . More than 16.7million

## Operating Environment

Temperature Range  
Operating Temperature: .....5°C to 35°C/41°F to 95°F  
Humidity .....20% to 80%  
Altitude.....0 to 6,562 Feet/ 0 to 2,000 m  
Storage Temperature: .....-10°C to 60°C /14°F to 140°F  
Storage Altitude.....0 to 40,000 Feet/0 to 12,192 m

## Power

US, 110v, European, 220v or Nema 6-20 220V

## Physical Specifications

**Without Stand:**  
(WxHxD) .....Not Exceed 22.3 x 15.3 x 3.3 inch (Without Stand)  
Weight.....Weight should not exceed 35 lbs with stand.

## Warranty

3-year on parts and labor

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Advanced Programs, Inc. is an ISO 9001:2018 certified facility Cert. #US-2683d-05  
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# TEMPEST Level I Thin Client

**Product Data**  
Model - CL1-T640 (Level I)

## Description

API's CL1-T640 is a highly secure, low profile TEMPEST stand-alone Thin Client offering high-speed, responsive system memory. This product augments API's thin client offerings with one that is intended for users that would like a cost reduced thin client option that does not have an integrated red/black KVM or integrated LCD as API's other (all-in-one) thin client platforms have. Tackle hybrid local and virtual computing workloads with the highest performing fanless desktop Thin Client in the market. Help keep your data safe with built-in security and AMD Memory Guard. Choose the right fit with a range of configuration options. Empower your workforce with performance that conquers every task an AMD Ryzen™ R1505G processor<sup>3</sup>, high-speed, responsive system memory, and native support for up to three UHD/4K displays. Remotely setup and deploy your devices, and get local-quality multimedia with exclusive software that makes this thin client capable, responsive, and reliable. Boasting a space efficient design the CL1-T640 delivers the best experience available on a TEMPEST thin computing platform and meets a wide range of user requirements in an easy to use and secure small form factor. By employing the advanced AMD Ryzen multicore processor with Radeon Vega 3 graphics processing, the CL1-T640 client provides the best performance in its class. Refined security allows data to be encrypted as it flows between the system memory and processor, protect firmware, and lock down access with an inherently secure thin client that has AMD Memory Guard, an embedded OS, and NIST SP800-147 compliance. Proactive protection controls deter unauthorized updates with an embedded operating system that protects flash memory. Customize user settings and permissions to monitor and control incoming and outgoing data. Secure your content and data even more with the integrated smartcard reader as a standard feature, Fiber Optic NIC connection options and fiber optic video option. The CL1-T640 is one of many products from Advanced Programs, Inc. the largest supplier of TEMPEST equipment in the world with a comprehensive product suite covering all of your IT Infrastructure needs. The CL1-T640 meets NSTISSAM TEMPEST/1-92 Level I and NATO SDIP-27 A standards (formerly AMSG 720B).

## Features

- Certified to NSTISSAM TEMPEST/1-92 Level I and NATO SDIP-27 A standards
- Utilizes display port with high performance digital technology
- Optional Accessories: AL1-185 Analog headset with optional analog ports, DAT-105 Ergo Keyboard, AL1-USBTOCOTS jumper non-Tempest API pinned USB to COTS USB for thumb drive local configuration.
- Available operating systems: Windows 10 IOT Enterprise LTSC 2019. Also available with HP ThinPro, including HP/Smart Zero Core
- Available with either fiber optic or copper video interface
- Latest AMD dual core processor for increased computing performance
- Memory: 8 GB DDR4 dual channel SDRAM standard, up to 32 GB
- Flash: 32 GB M.2 eMMC non-volatile flash module. Upgradable to 512GB M.2 NVMe
- Government approved integrated smart card reader that is field replaceable
- Industry leading three-year warranty





# TEMPEST Level I Thin Client

**Specifications**  
Model - CL1-T640 (Level I)

## Processor

AMD Ryzen R1505G. CPU Frequency Max/Base; 3.3/2.4 GHz.  
Cores/Threads; 2/4. GPU Type; Radeon Vega 3. GPU Frequency 1000 MHz.  
Memory: 8 GB DDR4 dual channel SDRAM standard, up to 32 GB (field upgradable)  
Flash: 32 GB M.2 eMMC non-volatile flash module. Upgradable to 512GB M.2 NVMe

## Input/Output

Standard:  
Video  
USB mouse and keyboard ports  
One USB port  
One 100MB/s, SC duplex fiber network  
Optional Upgrades  
Audio: Headphone and Mic in  
Video: fiber optic  
Network: 1,000mb/s LC

## Operating System

Standard: Windows 10 IoT Enterprise LTSC 2019.  
Optional: HP ThinPro, including HP /Smart Zero Core

## LCD Display Fiber Video

Viewable Size ..... 23 inch diagonal  
Pixel Pitch ..... 0.27mm  
Pixels Per Inch ..... 96 @ native resolution  
Brightness (typical) ..... 250 cd/m<sup>2</sup>  
Contrast Ratio (typical) ..... 1000:1 (25,000: dynamic)  
Viewing Angle (typical) ..... 170° Vert., 176° Hor.  
Response Time (typical) ..... Rapid Response (5ms)  
Display Colors ..... More than 16.7million

## Operating Environment

Temperature Range  
Operating Temperature: .....5°C to 35°C/41°F to 95°F  
Humidity .....20% to 80%  
Altitude .....0 to 6,562 Feet/ 0 to 2,000 m  
Storage Temperature: .....-10°C to 60°C /14°F to 140°F  
Storage Altitude.....0 to 40,000 Feet/0 to 12,192 m

## Power

100-240VAC 50-60Hz; 20W Typical, 45W Max

## Physical Specifications

**Without Stand:**  
(WxHxD) .....9.9 x 3.6x 12.0 inch (251.5 x 1.5 x 305 mm)  
Weight.....5.5 lbs (2.5 kgs)

## Warranty

3-year on parts and labor

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# TEMPEST Level I 24-Port Switch

## Product Data

Model - NL1-C9300-24S (Level I)

## Description

API's TEMPEST NL1-C9300-24S Switch is based on the Cisco® Catalyst WS-C9300-24S-A switch. Catalyst 9300 Series switches form the foundational building block for Software-Defined Access (SD-Access), Cisco's lead enterprise architecture. At up to 480 Gbps, they are the industry's highest-density stacking bandwidth solution with the most flexible uplink architecture. It sets new maximums for network scale. This switch is also ready for the future, with an x86 CPU architecture and more memory. The Catalyst 9300 Series is designed for Cisco StackWise® technology, providing flexible deployment with support for nonstop forwarding with Stateful Switchover (NSF/SSO), for the most resilient architecture in a stackable (sub-50-ms) solution. The switches are based on the Cisco Unified Access™ Data Plane 2.0 (UADP) 2.0 architecture which not only protects your investment but also allows a larger scale and higher throughput. A modern operating system, Cisco IOS® XE with programmability offers advanced security capabilities and Internet of Things (IoT) convergence. The Cisco® Catalyst 9300 Series Switches support a modular network module upgrade, fiber-based downlink interfaces. The Cisco® Catalyst 9300 Multigigabit Switches support current and next-generation speeds and standards on existing fiber infrastructure.



## Features

- Certified to NSTISSAM TEMPEST/1-92 Level I and NATO SDIP-27 A standard
- 24 x 1G SFP (Small Form Factor Pluggable) Ports slots, two Cisco StackWise-480 stacking ports, one USB 2.0 slot to load system images and set configurations (USB 2.0 slot hardware secured and administrable by API design), one network module slot for optional network module (C9300-NM-4G: Expansion of 4 x 1G SFP module slots)
- Cisco StackWise-480 technology provides scalability and resiliency with 480 Gbps of stack throughput
- Certified for use with Fiber Transceivers;GLC-GE-100FX (100Mb fiber) and GLC-SX-MMD (1G fiber), and network module; C9300-NM-4G
- Dual redundant (optionally available), modular power supplies and fans
- Cisco IOS XE, a modern operating system for the enterprise with support for model-driven programmability including NETCONF, RESTCONF, YANG, on-box Python scripting, streaming telemetry, container-based application hosting, and patching for critical bug fixes. The OS also has built-in defenses to protect against runtime attacks
- Dual-stack support for IPv4/IPv6 and dynamic hardware forwarding table allocations, for ease of IPv4-to-IPv6 migration
- Optional network module for 4 port expansion.



# TEMPEST Level I 24-Port Switch

## Specifications

Model - NL1-C9300-24S (Level I)

### Base Configuration

1 RU Stackable 24 x 1G SFP port multilayer switch (SFP modules sold as options)  
 Twenty-four (24) Small Form Factor Pluggable Ports (SFP) empty slots. Two (2)  
 Cisco StackWise-480 stacking ports. Secured administration port  
 Rack-Mount kit included; C9300-RAC-KIT  
 One 110v/220v 50/60 Hz auto sensing - auto switching 715 watt power supply -  
 Installed Qty; 1 (installed) / 2 (max). Power Redundancy; Optional. NEMA 5-15  
 (US) Power cord (Other power cords optional).  
 Stacking hardware; StackWise Cable (0.5M)  
 One empty Network module slot (network module optional)  
 DRAM; .....8 GB  
 Flash Memory; .....16 GB

### Options

Cables; STACK-T1-50CM Spare Cisco StackWise-480 50cm stacking cable  
 Network Module; C9300-NM-4G port expansion. Power Supply; NL1-C9300-  
 715WAC second / redundant 715W AC power supply.  
 SFP Modules;  
 GLC-SX-MMD For use in any C9300 port for 1G MMF applications. GLC-SX-MMD  
 The 1000BASE-SX SFP multimode fiber only, compatible with the IEEE 802.3z  
 1000BASE-SX standard, operates on legacy 50 µm multimode fiber links up to 550  
 m and on 62.5 µm Fiber Distributed Data Interface (FDDI)-grade multimode fibers  
 up to 220 m. It can support up to 1km over laser-optimized 50 µm multimode fiber  
 cable.  
 GLC-GE-100FX; 100MB MMF applications. 100BASE-FX SFP module for Gigabit  
 Ethernet ports, 1310 nm wavelength, 2 km over MMF.  
 Optional Power Cords; NEMA 6-20 power cord and EU power cord

### Environmental Ranges

#### Normal Operating Temperature and Altitudes:

-5°C to +45°C, up to 5,000 feet (1500 m)  
 -5°C to +40°C, up to 10,000 feet (3000 m)

#### Operating Environment and Altitude

##### Short-Term\* Exceptional Conditions:

-5°C to +50°C, up to 5,000 feet (1500 m)  
 -5°C to +45°C, up to 10,000 feet (3000 m)  
 -5°C to +45°C, at sea level with single fan failure

\* Not more than following in one year period: 96 consecutive hours

Relative Humidity .....5% to 95%, noncondensing  
 Storage Environment .....-40 C' to 70 C'  
 Altitude .....-15,000 ft  
 Operating: 0.41Grms from 3 to 500Hz with spectral break points of 0.0005 G2/Hz  
 at 10Hz and 200Hz 5dB/octave roll off at each end.

#### Vibration

Nonoperating: 1.12Grms from 3 to 500Hz with spectral break points of 0.0065  
 G2/Hz at 10Hz and 100Hz 5dB/octave roll off at each end.  
 Operating: Shock 30G, 2ms Half sine  
 Nonoperating: 55G, 10ms Trapezoid

### Mechanical

Height (1U) .....1.73 in. (4.43 cm)  
 Width .....17.5 in. (44.5 cm)  
 Depth .....19.2in. (47.9 cm)  
 Weight .....18.84 lbs. (8 kg)

### Warranty

1-year on parts and labor

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# TEMPEST Level I 16-Port Switch

## Product Data

Model - NL1-C9500-16X (Level I)

## Description

API's TEMPEST NL1-C9500-16X Switch is based on the Cisco® Catalyst C9500-16X-A switch. The NL1-C9500-16X is a next generation of enterprise-class core and aggregation layer switch, supporting full programmability and serviceability. Based on an x86 CPU, is Cisco's lead purpose-built fixed core and aggregation enterprise switching platform, built for security, IoT, and cloud. The switch comes with a 4-core x86, 2.4-GHz CPU, 16-GB DDR4 memory, and 16-GB internal storage. TEMPEST certified with 16x 1/10G Gigabit Ethernet SFP ports, it is compatible with 100mb, 1000mb and 10G SFP modules and is offered with and optional redundant power supply. Support includes advanced routing and infrastructure services (such as Multiprotocol Label Switching [MPLS] Layer 2 and Layer 3 VPNs, Multicast VPN [MVPN], and Network Address Translation [NAT]); Cisco Software-Defined Access capabilities (such as a host tracking database, cross-domain connectivity, and VPN Routing and Forwarding [VRF]-aware Locator/ID Separation Protocol [LISP]).



## Features

- Certified to NSTISSAM TEMPEST/1-92 Level I and NATO SDIP-27 A standard
- 16 x 1/10G SFP (Small Form Factor Pluggable) Ports slots, administration ports available and hardware secured by API design.
- Certified for use with Fiber Transceivers; 100BASE-FX multimode 100Mbps fiber, 1000BASE-SX multimode 1000Mbps fiber, and 10GBASE-SR multimode 10G fiber.
- Dual redundant (optionally available), modular power supplies and fans
- Cisco IOS® XE Software, a modern operating system for the enterprise with support for model-driven programmability, on-box Python scripting, streaming telemetry, container-based application hosting, and patching for critical bug fixes. The OS also has built-in defenses to protect against runtime attacks
- Dual-stack support for IPv4/IPv6 and dynamic hardware forwarding table allocations, for ease of IPv4-to-IPv6 migration



# TEMPEST Level I 16-Port Switch

## Specifications

Model - NL1-C9500-16X (Level I)

### Base Configuration

1 RU 16 x 10G SFP port multilayer switch (SFP modules sold as options)  
 Sixteen (16) Small Form Factor Pluggable Ports (SFP) empty slots. Secured administration port  
 Rack-Mount kit included; C9500-RAC-KIT  
 One 110v/220v 50/60 Hz auto sensing - auto switching power supply - Installed Qty; 1 (installed) / 2 (max). Power Redundancy; Optional. NEMA 5-15 (US) Power cord (Other power cords optional).  
 DRAM; .....16 GB  
 Flash Memory; .....16 GB

### Options

Cables; NL1-C9300-NEMA6-20 NEMA 6-20 power cord, NL1-C9300-EU EU power cord  
 Second Power Supply; second / redundant 110v/220v autosensing AC power supply.  
 SFP Modules;  
 GLC-SX-MMD For use in any C9300 port for 1G MMF applications. GLC-SX-MMD The 1000BASE-SX SFP multimode fiber only, compatible with the IEEE 802.3z 1000BASE-SX standard, operates on legacy 50 µm multimode fiber links up to 550 m and on 62.5 µm Fiber Distributed Data Interface (FDDI)-grade multimode fibers up to 220 m. It can support up to 1km over laser-optimized 50 µm multimode fiber cable.  
 GLC-GE-100FX; 100MB MMF applications. 100BASE-FX SFP module for Gigabit Ethernet ports, 1310 nm wavelength, 2 km over MMF.  
 SFP-10G-SR; SFP+ module with 10G support. The Cisco 10GBASE-SR Module supports a link length of 26m on standard Fiber Distributed Data Interface (FDDI)-grade multimode fiber (MMF). Using 2000MHz\*km MMF (OM3), up to 300m link lengths are possible. Using 4700MHz\*km MMF (OM4), up to 400m link lengths are possible.

### Environmental Ranges

#### Normal Operating Temperature and Altitudes:

-5°C to +45°C, up to 5,000 feet (1500 m)  
 -5°C to +40°C, up to 10,000 feet (3000 m)

#### Operating Environment and Altitude

Short-Term\* Exceptional Conditions:  
 -5°C to +50°C, up to 5,000 feet (1500 m)  
 -5°C to +45°C, up to 10,000 feet (3000 m)  
 -5°C to +45°C, at sea level with single fan failure

\* Not more than following in one year period: 96 consecutive hours

Relative Humidity .....5% to 95%, noncondensing  
 Storage Environment .....-40 C' to 70 C'  
 Altitude .....-15,000 ft  
 Operating: 0.41Grms from 3 to 500Hz with spectral break points of 0.0005 G2/Hz at 10Hz and 200Hz 5dB/octave roll off at each end.

### Vibration

Nonoperating: 1.12Grms from 3 to 500Hz with spectral break points of 0.0065 G2/Hz at 10Hz and 100Hz 5dB/octave roll off at each end.  
 Operating: Shock 30G, 2ms Half sine  
 Nonoperating: 55G, 10ms Trapezoid

### Mechanical

Height (1U) .....1.73 in. (4.43 cm)  
 Width .....17.5 in. (44.5 cm)  
 Depth .....21.2in. (49.9 cm)  
 Weight .....19.84 lbs. (9 kg)

### Warranty

1-year on parts and labor

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# TEMPEST Level I Kit Plus Video Teleconferencing System

**Product Data**  
Model - VL1-KITPLUS

## Description

API's VL1-KITPLUS is based on the Cisco® Spark Room Kit Plus and is certified to the NSTISSAM TEMPEST/1-92 Level I standard. The VL1-KITPLUS is a powerful collaboration solution that integrates with API's 65" TEMPEST flat-panel display to bring more intelligence and usability to your medium to large-sized meeting rooms. In addition, new capabilities enable even smarter meetings, smarter presentation capabilities, and smarter room and device integrations – further removing the barriers to usage and deployment of video in medium to large-sized rooms. It is comprised of a powerful codec and a quad-camera bar with integrated speakers and microphones – ideal for medium to large size conference rooms. It offers sophisticated camera technologies that integrates speaker-tracking and auto-framing capabilities and a TEMPEST telepresence touch 10 controller. The VL1-KITPLUS is available with upgrade options that include Tempest Cisco tabletop microphone 20s, and TEMPEST certified government approved headsets. The Codec can be mounted above the LCD to optimize the room installation and viewing angles. The VL1-KITPLUS delivers premium performance while maximizing customer value and security through API's market leading TEMPEST designs.

## Features

- Certified to NSTISSAM TEMPEST/1-92 Level I and NATO SDIP-27A standard
- Camera; 5K ultra HD camera, support up to 60 fps, 15.1 MP with 50° horizontal field of view, f/2.0 aperture, 83° horizontal field of view; 51.5° vertical field of view, auto-framing, 5120 x 2880 pixel resolution, auto focus, brightness, and white balance focus distance 1m to infinity
- Base unit includes; Cisco Spark Codec Plus, Cisco Spark Quad Camera, Cisco TelePresence Touch 10, wall mount for Quad Camera and 100mb fiber network interface. Option upgrades for headsets, up to three tabletop microphone 20s, 1 Gb/s fiber optic speeds and MultiSite (embedded multipoint) L-KIT-MS (L-ROOM-PAK).
- Detects and switches between active speakers and provides ideal framing
- Video standards; H.264, H.265. Bandwidth; up to 6 Mbps point to point
- Audio inputs; three d-9, audio outputs; 1 D-9 line out, Video outputs; 1 Display Port, 1 Fiber optic video. Network interface 100mb/s upgradable to 1 gb/s
- Wireless sharing disabled - Cisco Intelligent Proximity client is disabled
- Industry leading one-year warranty



65" LCD (shown) is certified with the KITPLUS

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# TEMPEST Level I Kit Plus Video Teleconferencing System

Specifications  
Model - VL1-KITPLUS

## Set delivered complete with:

Cisco Spark Codec Plus, Cisco Spark Quad Camera, Cisco TelePresence Touch 10, wall mount for Quad Camera, integrated speakers, cables and power supply. Option upgrades for headsets, up to three tabletop microphone 20s, 1 Gb/s fiber optic speeds and MultiSite (embedded multipoint) L-KIT-MS (L-ROOM-PAK).

## Bandwidth

up to 6 Mbps point-to-point

## Firewall Traversal

Cisco Expressway™ technology, H.460.18, H.460.19 firewall traversal

## Video Standards

H.264, H.265

## Software Compatibility

Cisco Collaboration Endpoint Software Version 9.0 or later, or Cisco Spark Room OS

## Video Inputs

None

## Video Outputs

Two video outputs support formats up to 3840 x 2160p60 (4Kp60). Live video resolutions (encode and decode) up to 1920 x 1080p60 (HD1080p). One video output Display Port (DP). Second video output is fiber optic video.

## Audio Standards

G.711, G.722, G.722.1, G.729, AAC-LD, and Opus

## Audio Features

High-quality 20 kHz audio, Automatic Gain Control (AGC), Automatic noise reduction, Active lip synchronization

## Audio Interfaces

**Audio inputs;** Three D-9 microphone inputs certified for use with three Table Microphone 20s, single AL1-185 Headset direct

**Audio outputs (external);** 1 x Line Out D-9 for Headset

## Protocols

H.323, SIP, Cisco Spark

## Minimum bandwidth for resolution/frame rate

H.264 - 720p30 from 768 kbps, 720p60 from 1152 kbps, 1080p30 from 1472 kbps, 1080p60 from 2560 kbps

## MultiPoint Support

MultiSite features (embedded multipoint) (optional upgrade); Adaptive SIP/H.323 MultiSite - 3-way resolution up to 1080p30 + content up to 4Kp5 - 4-way resolution up to 720p30 + content up to 4Kp, Full individual audio and video transcoding, .323/SIP/VoIP in the same conference, Support for presentation (H.239/BFCP) from any participant at resolutions up to 3840 x 2160p5, Best Impression (automatic continuous presence layouts), Encryption and dual stream from any site.

## IP Network Features

DNS lookup for service configuration, Differentiated services (Quality of Service [QoS]), IP-adaptive bandwidth management (including flow control, Automatic gatekeeper discover, Dynamic playout and lip-sync buffer), H.245 Dual-Tone Multifrequency (DTMF) tones in H.323, RFC 4733 DTMF tones in SIP, Date and time support using Network Time Protocol (NTP), Media adaption and resilience Uniform Resource Identifier (URI) dialing, Dynamic Host Configuration Protocol (DHCP), 802.1X network authentication, 802.1Q Virtual LAN, 802.1p (QoS and Class of Service [CoS])

## Security Features

Management via HTTPS and SSH, IP Administration Password, Menu Administration Password, Disable IP services, Network Settings protection

## Network interfaces and codec medium

100MB Fiber SC for LAN, One D9STempest interface for direct pairing with camera, One D9P Tempest interface with Power for direct pairing with Touch 10, Wi-Fi and Bluetooth are both disabled.

## VTC Dimensions

Dimensions (W x H x D) . . . . . 37.4"x 7.0"x 5.3" inches (45.5 x 18.5 x 16 cm)  
VTC Weight . . . . . 18 lbs (8kg)

## Display (65 inch) Dimensions

Dimensions (W x H x D) . . . . . 57.2"x 32.8"x 2.5" inches (146 x 84 x 6.4 cm)  
Display Weight w/ stand . . . . . 130 lbs (59kg)

## Power Interface Cables

US, 6 Ft., 115v, EU, 6 Ft., 220v, UK, 6 Ft., 220v

## Option

VL1-AUDX4 Audio Splitter Kit that splits audio in/out to four individual volume-controllable channels

## Warranty

1-year on parts and labor

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Advanced Programs, Inc. is an ISO 9001:2015 certified facility - Cert. #US-2683d-05

Technical Specifications are subject to change without notice. U.S.A. export controls apply to these products.

E & OE -3/20

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# TEMPEST Level I Video Teleconferencing System

**Product Data**  
Model - VL1-KITMINI

## Description

API's VL1-KITMINI is based on the Cisco® Webex® Room Kit Mini and is certified to the NSTISSAM TEMPEST/1-92 Level 1 standard. It is an Artificial Intelligence (AI)-powered video conferencing system custom designed for desktop or small workgroup environments, and is easy to use, deploy, and manage. It combines codec, camera, microphones, and speakers into a single device that integrates with a high definition display to bring more intelligence and usability to all of your huddle rooms and spaces. Security features of API's version of the Cisco KitMini include physical layer user control of microphone via hardware-secure muting and hardware video control that are switched on or off independently of software to leave no doubt the device is in a secured state when not in use. API also securely eliminates proximity detection and auto-wake functions with methods that are independent of software / firmware. Optional security features are fiber video port, TEMPEST certified headset, TEMPEST certified audio splitter providing four individually volume-controlled user audio channels for headset listening. The Room Kit Mini is ideal for desktops or huddle spaces with one to five people because of its wide 120-degree field of view, which allows everyone in a space to be seen.

## Features

- Certified to NSTISSAM TEMPEST/1-92 Level I and NATO SDIP-27 A standard
- 4K Ultra-HD camera, supports up to 60fps, 8 MP image sensor, 1/14 CMOS, 2x zoom f/14 aperture, 120-degree field of view
- Easily controlled by the Cisco Touch 10 control unit.
- Smart meetings. Powerful integrated cameras deliver intelligent view capabilities, such as automatic framing; automatic noise suppression reduces meeting disruptions.
- Smart rooms. People count for usage metrics and resource allocation. Tight integrations with screens enhance user interactions and meeting personalization.
- Audio and video security implemented independently of software or firmware



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# TEMPEST Level I Video Teleconferencing System

## Specifications

Model - VL1-KITMINI

### Set delivered complete with:

Fully Integrated RoomKitMini w/ 23" LCD, Touch 10 (with cable) and power cables

### Software compatibility

Cisco Collaboration Endpoint Software Version 9.6 or later, and Cisco Webex Room OS

### Bandwidth

Up to 6 Mbps point to point

### Firewall Traversal

Cisco Expressway™ Technology.H.460.18, H.460.19 Firewall Traversal

### Video Standards

H.264, H.265

### Minimum bandwidth for resolution / frame rate

H.264: 720p30 from 768 kbps, 720p60 from 1152 kbps, 1080p30 from 1472kbps, 1080p60 from 2560 kbps

### Audio Features

High-quality 20 kHz audio, Automatic Gain Control (AGC), Automatic noise reduction, Active lip synchronization

### Audio Input

Internal microphones

### Video Outputs

1 x DisplayPort Output supports formats up to 3840 x 2160p60 (4Kp60)

### Optional Fiber Video

Audio Standards; G.711, G.722, G.722.1, G.729, AAC-LD, and Opus

### MultiSite

H.239 (H.323) dual stream, Binary Floor Control Protocol (BFCP) (SIP) dual stream, Supports resolutions up to 3840 x 2160p5

### Protocols

H.323, SIP, Cisco Webex

### MultiPoint Support

4-way embedded SIP/H.323 conferencing capability with MultiSite option

### Embedded Encryption

H.323/SIP point-to-point, Standards-based: H.235 v3 and AES, Automatic key generation and exchange

### Options

upgrade from 100mb/s fiber to 1Gb/s fiber network interface, VL1-AUDX4 (4 channel audio amplifier) for use with headsets, AL1-185 headset, AL1-FiberExtend (DisplayPort to fiber converter / extender)

### IP Network Features

DNS lookup for service configuration, Differentiated Services (QoS), IP adaptive bandwidth management (including flow control), Auto gatekeeper discovery, Dynamic playout and lip-sync buffering, H.245 DTMF tones in H.323, Date and Time support via NTP, Media adaptation and resilience, Uniform Resource Identifier (URI) dialing, Dynamic Host Configuration Protocol (DHCP), 802.1X network authentication, 802.1Q Virtual LAN, 802.1p (QoS and Class of Service [CoS])

### IPv6 network support

Single call stack support for both H.323 and SIP, Dual-stack IPv4 and IPv6 for DHCP, SSH, HTTP, HTTPS, DNS, DiffServ, Support for both static and automatic IP configuration (stateless address auto configuration)

### Power

100 to 240 VAC, 50/60 Hz, 12V DC input, Average 20W, peak 70W

### Camera overview

4K UltraHD camera, Supports up to 60 fps (max 30 fps with best overview enabled), 8 MP image sensor, 1/1.4 CMOS, 2x zoom, f/1.4 aperture, 120° horizontal field of view, Auto framing (face detect), Auto focus, brightness, and white balance, Focus distance 1 m to infinity

### Warranty

1-year on parts and labor

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# TEMPEST Video-Conferencing Peripherals

## Product Data

Model - AL1-C922 (level I)  
Model - AL1-185 (Level I)  
Model - DAT-602 (Level I)

## Description

These peripherals enable users to take advantage of software-based video conferencing applications while providing a critical set of security features.

The AL1-C922 TEMPEST Webcam is a full feature webcam with the added security of TEMPEST certification, on/off status indicator and an opaque lens cover. Audio disabled.

The AL1-185 TEMPEST Headset is a rugged with high quality noise-cancelling MIC and stereo sound. It offers the added security of TEMPEST certification.

The DAT-602 TEMPEST Positive Disconnect Switch provides additional security features for API's TEMPEST Webcam and Headset. This includes positive disconnection points as well as "live-mode" indicators. The DAT-602 is an optional level of security between the host computer and the headset/camera.



### AL1-C922 TEMPEST Webcam

- Full HD glass lens and premium autofocus deliver razor-sharp, clear video in consistent high definition
- Based on the Logitech C922 Pro Stream Webcam
- Record clear videos even in dim or poorly backlit settings with automatic light correction
- 78-degree field of view
- High-definition video in 1080p or 720p at 60fps. Includes a tripod featuring a 360-degree swivel mount with legs extending from 4.3 inches to 7.3 inches
- H.264 Encoding
- Universal clip fits laptops, LCD or CRT monitors
- Speakers and two omnidirectional mics physically disabled for security
- "Live" camera indicator
- D15S Hi-Speed USB 2.0 interface (optional Lemo and D9s)



### AL1-185 TEMPEST Headphones

- Exclusive passive noise cancelling microphone meets the highest standards to receive the coveted "6 Dragon" rating for speech accuracy by Nuance
- Pro-Flex wire microphone boom for perfect placement
- 40mm stereo speakers with deep bass sound deliver crystal clear audio
- 8-foot shielded cable
- Microphone: noise cancellation 5dB/Octave, Frequency response 100Hz-10KHz, Electrical Signal-to-noise ratio >60db, Sensitivity at 1kHz (0db=1V/Pa) -44db, Current Consumption <0.5mA



### DAT-602 TEMPEST Positive Disconnect Switch

- Push button controls provide positive disconnect to the camera and headset so that these peripherals can stay connected in secure mode
- High quality, tool-less, quick-connect interfaces for camera, headset and PC connections
- LED indicators clearly show when the headset and camera are in "live" or active modes of operation
- Integrated amplifier with manual volume control to assist hearing impaired for 508 compliance

Warranty - One-Year. Advanced Programs, Inc. is an NSA-endorsed test services facility and an NSA-endorsed TEMPEST manufacturing facility. Advanced Programs, Inc. is an ISO 9001:2008 certified facility - Cert. #US-2683d. Technical Specifications are subject to change without notice. U.S.A. export controls apply to this product. E&OE/18.

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# TEMPEST Noise cancelling Headphone

## Product Data

Model - AL1-HD300PRO (Level I)



The TEMPEST AL1-HD300PRO are closed (over ear) headphones designed for use in environments that have high background noise. Its highly sensitive transducers with precision diaphragms deliver high resolution, neutral and distortion free sound across the entire frequency spectrum. In addition to meeting TEMPEST Level 1 standards, this headphone also meets government standards for passive noise cancellation all in a very ergonomic, comfortable and user friendly design.

Viscoelastic ear pads and specially sealed acoustic elements provide efficient shielding against external noise. A high level of wearing comfort is ensured by optimum pressure distribution.

### FEATURES

- Certified to NSTISSAM TEMPEST/1-92 Level I and NATO SDIP-27 A standard
- High-resolution and distortion-free sound for professional monitoring
- Linear frequency response
- Efficient, passive noise attenuation that meets government standards for security
- 8-foot shielded cable
- Frequency response 6Hz-25KHz
- Ambient noise attenuation  $\leq 32$  dB
- One-year warranty

### SPECIFICATIONS

- Acoustic: principle dynamic, closed
- Ear coupling: circumaural
- Impedance 64  $\Omega$
- Power rating 500 mW
- Sensitivity 108  $\pm$  3 dB SPL / 1 Vrms / 1 kHz
- Max. SPL 123 dB SPL @ 1 kHz
- Ambient noise attenuation  $\leq 32$  dB
- Distortion  $< 0.1\%$  @ 1 kHz, 94 dB SPL
- Contact pressure approx. 6.0 N
- Weight (w/o cable) approx. 297 g
- Cable length approx. 1.55 m
- Operation Temperature: -15  $^{\circ}$ C to +55  $^{\circ}$ C (5  $^{\circ}$ F to 131  $^{\circ}$ F)
- Storage Temperature: -55  $^{\circ}$ C to +70  $^{\circ}$ C (-67  $^{\circ}$ F to 158  $^{\circ}$ F)

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# TEMPEST 4-channel Headset Amplifier and Microphone Controller

## Product Data

Model - VL1-AUDX4 (Level I)



The VL1-AUDX4 is Tempest Level 1 certified, compact 4-channel stereo headphone amplifier that includes a microphone mute switch to disconnect all VTC and Headset microphones. The product can amplify up to 4-pairs of headphones and up to 4 independent volumes all at the same time. Have up to 4 different people use the VL1-AUDX4 headphone amp to hear the main audio and set their own volume level using each channel's output level control. The VL1-AUDX4 is designed to be used in conjunction with API's VTC systems in order to ensure privacy during video teleconferences while maintaining the highest audio quality even at maximum volume levels. Ultra-low noise.

## FEATURES

- Certified to NSTISSAM TEMPEST/1-92 Level I and NATO SDIP-27 A standard
- 4-channel stereo headphone amplifier for use with API Tempest AL1-185 headphones
- Four high-power stereo amplifiers
- High audio quality even at maximum volume
- Output level control for each channel
- Ultra low-noise 4580 operational amplifiers for outstanding audio performance
- DC 12-Volt adapter included
- High-quality components and exceptionally rugged construction ensure long life
- One-year warranty

## SPECIFICATIONS

### Input

- Interface Type: API TEMPEST VTC D9 Headset Output port

### Headphone Outputs

- Type: D9, stereo
- Impedance: Approx. 32 Ohms
- Maximum Output Level: Approx. 10 mW per channel in 32 Ohms

### Power Supply

- External power supply, 12 V, 150 mA
- Power Range: Autorangeing 120-240V, 50-60Hz

### Physical Specifications

- Dimensions (approx.): 2.81 x 7.24 x 6.64 inches (71.4 x 184 x 169 mm)
- Weight (approx.): 0.7 lbs. (.32 kg)

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# TEMPEST Level I HP® Color LaserJet M577 Digital Sender/Copier/Printer

**Product Data**

Model - PL1-M577 (Level I)

## Description

API's TEMPEST version of the HP® M577 MFP Multifunction Color Laser Printer is an ideal choice for those who need a multifunction machine that will handle all of their color digital sending, printing, scanning, and copying and secure faxing needs. The design is such that the PL1-M577 can sit on top of a desk but it still has all of the capabilities of much more expensive all in one color laser printers. Enhance work team productivity with black-and-white and color print speeds up to 40 pages per minute (ppm). Reduce energy use with HP® Auto-On/Auto-Off Technology, and conserve power with Instant-on technology. Count on reliable, consistent, high-gloss, high-quality printing from a desktop MFP featuring an 8-inch touchscreen and protect documents with PIN printing capability. Reduce paper use with automatic single-pass two-sided printing and scanning, storing and distributing documents digitally. Receive value out of the box – this product is shipped with a full set of original HP LaserJet toner cartridges. Meet your specific business needs with support for a range of paper sizes and types, including glossy and heavy paper. Save time while providing greater value to users and your business. Easily control who can print in color and how much.

## Features

- Certified to NSTISSAM TEMPEST/1-92 Level I and NATO SDIP-27 A standard (formerly AMSS 720B)
- Print Speed: Up to 40 ppm
- On-board OCR to transfer scans into editable text and save in a variety of file types
- Full-size pullout keyboard for faster, more accurate data entry
- Scan to SharePoint, email, network folder – no PC or software required
- Paper Handling: Input: 100-sheet multipurpose tray 1, 550-sheet input tray 2, 250-sheet face-down output bin, convenience stapler. Optional 550-sheet trays
- Removable hard drive
- Secure AES-256 FIPS-140.2 encrypted removable hard drive
- Optional SIPRNET SmartCard Reader
- Print Resolution: 1200 x 1200 dpi
- Connectivity: Fiber network, USB
- Industry leading one-year warranty



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# TEMPEST Level I HP® Color LaserJet M577

## Digital Sender/Copier/Printer

### Specifications

Model - PL1-M577 (Level I)

#### Functions

Print, copy, scan, digital send, convenience stapler

#### Duplex Print Options

Automatic (standard)

#### Standard Printer Languages

HP® PCL 6, HP® PCL 5c (HP® PCL 5c driver available from the Web only), HP® Postscript Level 3 emulation, native PDF printing (v 1.7)

#### Print Speed

Black: Up to 40 ppm; Color: Up to 40 ppm; First Page Out: As fast as 5.7 sec (black) and 6.8 sec (color)

#### Print Resolution

Black and Color (Best): Up to 1200 x 1200 dpi

#### Print Technology

Laser

#### Number of Print Cartridges

4 (1 black, cyan, magenta, yellow)

#### Duty Cycle

Monthly; Up to 80,000 pages  
Recommended Monthly Page Volume; Up to 2,000 to 7,500 pages

#### Scan Resolution

Enhanced: Up to 600 dpi; Hardware: Up to 600 x 600 dpi; Optical: Up to 600 dpi

#### Scan Speed

Normal, A4: Up to 45 ppm (b&w), up to 45 ppm (color); Normal, Letter: Up to 48 ppm (b&w), up to 48 ppm (color)

#### Digital Sending Standard Features

Scan to E-mail, Save-to-Network Folder, Save-to-USB drive, Send to Sharepoint, Send to FTP, Send to LAN Fax, Send to Internet Fax, OCR, Local Address Book, SMTP over SSL

#### Scan File Format

PDF, JPEG, TIFF, MTIFF, XPS, PDF/A

#### Scan Size Maximum

8.5 x 14 in (216 x 356 mm)

#### Memory

Maximum/Standard: 1.25 GB, Upgradable to 2 GB

#### Processor Speed

1.2 GHz

#### Hard Disk

Standard, embedded HP High-Performance Secure Hard Disk, minimum 500 GB; AES 256 hardware encryption or greater; Secure erase capabilities (Secure File Erase-Temporary Job Files, Secure Erase-Job Data, Secure ATA Erase-Disk)

#### Operating Environment

Temperature Range: . . . . . 59 to 81° F (15 to 30° C)  
Recommended Operating Temperature: . . . . . 62 to 77° F (17 to 25° C)  
Storage Temperature Range: . . . . . 32 to 95° F (0 to 35° C)  
Non-Operating Humidity Range: . . . . . 10 to 90% RH  
Operating Humidity Range: . . . . . 10 to 80% RH  
SRcommended Humidity Operating Range: . . . . . 30 to 70% RH

#### Product Dimensions

18.98 x 19.84 x 22.95 in (482 x 504 x 583 mm) Maximum: 27.5 x 19.84 x 22.95 in (699 x 504 x 583 mm) tray 1 open with legal extension, keyboard extended

#### Product Weight

88lb (39.9 kg)

#### Supplies

110-volt Fuser Kit, 220-volt Fuser Kit, HP 100 ADF Roller Replacement Kit, Black LaserJet Toner Cartridge (yield ~ 5,500 pages), Black LaserJet Toner Cartridge (yield ~ 11,000 pages), Cyan LaserJet Toner Cartridge (yield ~ 6,000 pages), Yellow LaserJet Toner Cartridge (yield ~ 6,000 pages), Magenta LaserJet Toner Cartridge (yield ~ 6,000 pages)

#### Warranty

1-year on parts and labor

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# TSG 8841 Cisco® IP Phone

TSG, TEMPEST/TSG, Modified COTS, & Cisco<sup>+</sup> models available

## Product Data

Model - EL1-8841  
EM-8841

API's version of the Cisco® 8841 phone is TSG certified as compliant with CNSI 5001 and provides the critical security features required for both unclassified and classified VoIP telephony systems. API's TSG approved 8841 VoIP phones cost effectively provide the latest in Cisco® technology with API security technology. API's 8841 VoIP phones feature Energy Wise™ technology, wide band audio, WVGA color display, five programmable line keys, up to 1 GB LAN and PC connections as well as interoperability with a comprehensive suite of unified communication features supported by Cisco® communication servers. API integrated TSG compliant technology, physical secure hold and mute, and other security technologies mitigate the risks of electronic eavesdropping and cyber compromise. The 8841 is also available in other configurations such as TEMPEST/TSG, Modified COTS, and Cisco<sup>+</sup>.



API's 8841 design uniquely combines TEMPEST and TSG certification with modular security to provide customers the ability to easily configured TEMPEST or TSG models to meet cost and security requirements.



# TSG 8841 Cisco® IP Phone

TSG, TEMPEST/TSG, Modified COTS, & Cisco+ models available

## Specifications

Model - EL1-8841  
EM-8841

### Handset

Std. wideband-capable audio or optional Push-to-Talk handset

### Speaker phone

Hands free full-duplex speakerphone

### Headsets

Analog headsets available with the EM-8841 model only

### Ethernet switch

Internal 2-port Cisco Ethernet switch for connection of phone and PC over single line.

### Keys

Line keys, soft keys, back and release keys, four-way navigation & and select keys resume, transfer& conference keys, messaging, application, & directory keys. Standard keypad, volume control toggle key, speakerphone, headset.

### Dimensions (H x W x D)

9.02 x 10.13 x 1.57 in. (229.1 x 257.34 x 40 mm)

### Weight

2.58 lb. (1.17 kg) (with handset)

### Temperatures

Operational 32 to 104°F (0 to 40°C)

Non Operational Shock 14 to 140°F (-10 to 60°C)

### Humidity

Operating 10 to 90%, noncondensing

Non-operating 10 to 95%

### Backlit indicators

Audio path keys select key, line keys & message waiting.

### Power

EEE Power over Ethernet class 2; fiber

AC-to-DC (48V) power supply

### Cisco Unified Communications Manager

8.5.1, 8.6.2, 9.1.2, 10.0 and later

### Network features

Session Initiation Protocol (SIP) for signaling, Session Description Protocol (SDP), IPv4 and IPv6, User Datagram Protocol (UDP), Dynamic Host Configuration Protocol (DHCP), Gratuitous Address Resolution Protocol (GARP), Domain Name System (DNS), Trivial File Transfer Protocol (TFTP), Secure Hypertext Transfer Protocol (HTTPS), VLAN, Real-Time Transport Protocol (RTP), Peer-to-peer Distribution Protocol (PPDP), Cisco Discovery Protocol, LLDP/LLDP-MED, Switch speed auto-negotiation

### Security features

Secure boot, secure credential storage, device authentication, configuration file authentication and encryption, image authentication, random bit generation, hardware cryptographic acceleration, Certificate Authority Proxy Function(CAPF), Manufacturer-Installed Certificates (MIC), Locally Significant Certificates (LSC), Ethernet 802.1x supplicant options: Extensible Authentication Protocol-Flexible Authentication via Secure Tunneling (EAP-FAST) & Extensible Authentication Protocol-Transport Layer Security (EAP-TLS), Signaling authentication & encryption using TLS, Media authentication & encryption using SRTP, HTTPS for client & server, Secure Shell (SSH) Protocol server, SSL-based VPN client

### Warranty

1-year on parts and labor

Advanced Programs, Inc. is an NSA-certified test services facility and an NSA-certified TEMPEST manufacturing facility.

Advanced Programs, Inc. is an ISO 9001:2015 certified facility - Cert. #US-2683d-05

Technical Specifications are subject to change without notice.

Export of TEMPEST configurations are subject to the ITAR. Export of TSG configurations are subject to the EAR.

E & OE - 11/19

TEMPEST/TSG	Model Numbers	Description	TSG Accreditation Number
	EL1-8841-06L1	8841 IP TEMPEST NTSWG PHONE, 1 FIBER ST 100MB, W/PWR SUP,NO SPKR PHONE	TSG-A-21-2016
	EL1-8841-07L1	8841 IP TEMPEST NTSWG PHONE, 2 FIBER ST 100MB, W/PWR SUP,NO SPKR PHONE	TSG-A-22-2016
	EL1-8841-08L1	8841 IP TEMPEST NTSWG PHONE, 1 FIBER ST 1GB, W/PWR SUP,NO SPKR PHONE	TSG-A-23-2016
	EL1-8841-09L1	8841 IP TEMPEST NTSWG PHONE, 2 FIBER ST 1GB, W/PWR SUP,NO SPKR PHONE	TSG-A-24-2016
TSG	Model Numbers	Description	TSG Accreditation Number
	EM-8841-06	8841 IP NTSWG PHONE, 2-PORT 10/100/1000-T POE (Class B)	TSG-B-11-2015
	EM-8841-06S	8841 IP NTSWG PHONE, 2-PORT 10/100/1000-T POE, NO MIC (Class B)	TSG-B-01-2016
	EM-8841-06M	8841 IP NTSWG PHONE, SOFT MUTE, 2-PORT 10/100/1000BASE-T ETHERNET RJ45 POE (Class B)	TSG-B-13-2015
	EM-8841-07	8841 IP NTSWG PHONE, 2-PORT FIBER SC 100MB, W/PWR SUP (Class A)	TSG-A-01-2015
	EM-8841-07M	8841 IP NTSWG PHONE, SOFT MUTE, 2-PORT FIBER SC 100MB, POWER BRICK (Class A)	TSG-A-10-2016
	EM-8841-08	8841 IP NTSWG PHONE, 2-PORT FIBER LC 1G, W/PWR SUP (Class A)	TSG-A-03-2015
	EM-8841-09	8841 IP NTSWG PHONE, 1-PORT FIBER SC 100MB, W/PWR SUP (Class A)	TSG-A-04-2015
	EM-8841-09M	8841 IP NTSWG PHONE, 1-PORT FIBER SC 100MB, W/PWR SUP (Class A), MUTE	TSG-A-02-2016
	EM-8841-10	8841 IP NTSWG PHONE, 1-PORT FIBER LC 1G, W/PWR SUP (Class A)	TSG-A-05-2015
	EM-8841-11	8841 IP NTSWG PHONE, 2-PORT 10/100/1000-T POE, NO SPKR PHONE (Class B)	TSG-B-12-2015
	EM-8841-12	8841 IP NTSWG PHONE, 2-PORT FIBER SC 100MB, W/PWR SUP, NO SPKR PHONE (Class A)	TSG-A-02-2015
	EM-8841-13	8841 IP NTSWG PHONE, 2-PORT 10/100-T POE (Class A)	TSG-A-11-2017
	EM-8841-13M	8841 IP NTSWG PHONE, 2-PORT 10/100-T POE, W/MUTE BUT (Class A)	TSG-A-09-2017
	EM-8841-13MS	8841 IP NTSWG PHONE, 2-PORT 10/100-T POE, W/MUTE BUT, NO MIC (Class A)	TSG-A-43-2018
	EM-8841-14	8841 IP NTSWG PHONE, 2-PORT 10/100/1000 BASE-T ETHERNET RJ45 POE,NO SPKR PHONE, NO MIC (Class A)	TSG-A-10-2017
	EM-8841-15	8841 IP NTSWG PHONE, 2-PORT FIBER LC 1G, W/PWR SUP, NO SPKR PHONE (Class A)	TSG-A-03-2017
TEMPEST	Model Numbers	Description	
	EL1-8841-01L1	8841 IP TEMPEST PHONE, 2 FIBER SC 100MB, W/PWR SUP,NO SPKR PHONE	
	EL1-8841-02L1	8841 IP TEMPEST PHONE, 2 FIBER LC 1G, W/PWR SUP,NO SPKR PHONE	
	EL1-8841-03L1	8841 IP TEMPEST PHONE, 1 FIBER SC 100MB, W/PWR SUP,NO SPKR PHONE	
	EL1-8841-04L1	8841 IP TEMPEST PHONE, 1 FIBER LC 1G, W/PWR SUP,NO SPKR PHONE	
Mod. COTS	Model Numbers	Description	
	EM-8841-01	8841 IP PHONE, 2-PORT 10/100/1000-T POE	
	EM-8841-02	8841 IP PHONE, 2-PORT FIBER SC 100MB, W/PWR SUP	
	EM-8841-03	8841 IP PHONE, 2-PORT FIBER LC 1G, W/PWR SUP	
	EM-8841-04	8841 IP PHONE, 1-PORT FIBER SC 100MB, W/PWR SUP	
	EM-8841-05	8841 IP PHONE, 1-PORT FIBER LC 1G, W/PWR SUP	

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# 8865 Cisco® IP Video Phone

TSG and TEMPEST models available

## Product Data

Model - EL1-8865  
EM-8865

Providing the critical security features required to secure high-fidelity voice and HD video communications, API's 8865 VoIP phones are TSG and TEMPEST certified. Compliant with CNSSI 5001 defined TSG requirements and NSTISSAM TEMPEST/192 Level I standards, these phones provide the latest in Cisco® technology. They are offered with optional line expansion capability via a securely integrated key expansion module (KEM). The IP Phone 8865 combines an attractive new ergonomic design with 720p HD video and wideband audio for crystal clear voice communications, encrypted voice communications for enhanced security and access to a comprehensive suite of unified communications features. API's 8865 VoIP phones feature five programmable line keys (expandable with optional KEM, speaker phone and KEM are available only on non-TEMPEST configurations), 5 inch high resolution (800 x 480) widescreen VGA backlit color display, a switch that enables phone only mode, built-in copper (non-TEMPEST version only) or fiber network interface that is also available in switched dual-port for both network connection and your PC connection, optional colored bezels for classification levels, optional Push-to-Talk handsets and wall mount.



To fully optimize security, functionality and cost, API has leveraged its Solution Technology Integrator partnership with Cisco® as well as actively sought Intel/Defense customer input to our design and build. Wireless capability on all API 8865 models has been removed and a secured KEM port precludes user access on models not configured with an integrated KEM module. Available in a variety of secure models with easily configurable accessories, API's 8865 delivers the latest in secure VOIP telephony and secure HD video communications.



# 8865 Cisco® IP Video Phone

TSG and TEMPEST models available

## Specifications

Model - EL1-8865  
EM-8865

### Handset

Std. wideband-capable audio or optional Push-to-Talk handset

### Graphical Display

The 800 × 480, 24-bit color, 5-in. WVGA display provides scrollable access to calling features and text-based XML applications

### Speaker phone

The full-duplex speakerphone gives you flexibility in placing and receiving calls with hands free. For added security, the audible dual tone multi-frequency (DTMF) tones are masked when the speakerphone mode is used. (Speaker phone is available only on non-TEMPEST configurations.)

### Headsets

Analog headsets with microphone

### Ethernet switch

Internal 2-port Cisco Ethernet switch for connection of phone and PC over single line.

### Keys

Line keys, soft keys, back and release keys, four-way navigation and select keys, secure hold/resume, transfer, conference keys, messaging, application, directory keys. Standard keypad, volume control toggle key, headset, and mute keys

### Dimensions (H x W x D)

9.01 x 10.13 x 3.87 in. (228.9 x 257.34 x 98.3 mm)

### Weight

3.4 lb. (1.54 kg) (with handset)

### Temperatures

Operational 32 to 104°F (0 to 40°C)

Non Operational Shock 14 to 140°F (-10 to 60°C)

### Humidity

Operating 10 to 90%, noncondensing

Non-operating 10 to 95%

### Backlit indicators

The phone supports backlit indicators for the audio path keys (Handset, Headset, and Speakerphone), select key, line keys, and message waiting

### Key Expansion Module KEM

Optional key expansion module supporting up to 36 additional line appearances. (KEM is available only on non-TEMPEST configurations.)

### Power

IEEE Power over Ethernet class 4 OR optional power cube is used as an AC-to-DC (48V) power supply for non-PoE deployments.

### Cisco Unified Communications Manager

8.5.1, 8.6.2, 9.1.2, 10.5.2, 11.0 and later

### Network features

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Cert. #US-2683d-05

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Model Numbers	Description	TSG Accreditation Number
<b>TEMPEST/TSG</b>		
EL1-8865-01L1	8865NR VOIP TEMPEST NTSWG PHONE, 1 FIBER SC 100MB, NO SPKR PHONE (Class A)	TSG-A-45-2018
EL1-8865-02L1	8865NR VOIP TEMPEST NTSWG PHONE, 2 FIBER SC 100MB, NO SPKR PHONE (Class A)	TSG-A-46-2018
EL1-8865-03L1	8865NR VOIP TEMPEST NTSWG PHONE, 1 FIBER LC 1G, NO SPKR PHONE (Class A)	TSG-A-47-2018
EL1-8865-04L1	8865NR VOIP TEMPEST NTSWG PHONE, 2 FIBER LC 1G, NO SPKR PHONE (Class A)	TSG-A-48-2018
<b>TSG</b>		
EM-8865-07	8865NR VOIP NTSWG VIDEO PHONE, 2 FIBER SC 100MB, W/PWR SUP (Class A)	TSG-A-15-2018
EM-8865-07M	8865NR VOIP NTSWG VIDEO PHONE, 2 FIBER SC 100MB, W/PWR SUP, MUTE (Class A)	TSG-A-16-2018
EM-8865-08M	8865NR VOIP NTSWG VIDEO PHONE, 2 FIBER LC 1G, W/PWR SUP, MUTE (Class A)	TSG-A-14-2018
EM-8865-09	8865NR VOIP NTSWG VIDEO PHONE, 1 FIBER SC 100MB, W/PWR SUP (Class A)	TSG-A-17-2018
EM-8865-09M	8865NR VOIP NTSWG VIDEO PHONE, 1 FIBER SC 100MB, W/PWR SUP, MUTE (Class A)	TSG-A-18-2018
EM-8865-09NB	8865NR VOIP NTSWG VIDEO PHONE, 1 100MB SC, NO SPKR PHONE (Class A)	TSG-A-19-2018
EM-8865-09S	8865NR VOIP NTSWG VIDEO PHONE, 1 100MB SC, NO BASE MIC (Class A)	TSG-A-20-2018
EM-8865-10M	8865NR VOIP NTSWG VIDEO PHONE, 1 FIBER LC 1G, W/PWR SUP MUTE (Class A)	TSG-A-13-2018
EM-8865-13	8865NR VOIP NTSWG PHONE, 2 10/100-T, POE (Class A)	TSG-A-21-2018
EM-8865-13M	8865NR VOIP NTSWG PHONE, 2 10/100-T, POE W/MUTE (Class A)	TSG-A-22-2018
EM-8865-13S	8865NR VOIP NTSWG PHONE, 2 10/100-T, POE NO BASE MIC (Class A)	TSG-A-23-2018
EM-8865-14	8865NR VOIP NTSWG PHONE, 2 10/100-T, POE NO SPKR PHONE (Class A)	TSG-A-24-2018

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