Cisco Emergency Communication Kit

Powerful and Portable IP Based Communications

The Cisco Emergency Communication Kit (ECK) is designed to establish voice and data communication quickly, securely, and reliably in austere environments requiring critical reach back capabilities. The Cisco ECK solution, with its rugged design, can withstand harsh conditions and when pre-configured, is simple to deploy and use.

The ECK is based on commercial off-the-shelf products, using standard Internet Protocol (IP) and Cisco’s industry-leading voice-over-IP (VoIP) technology solutions. The Emergency Communication Kit, with integrated LTE capability, is a powerful asset in environments where flexible communications infrastructure is unavailable and is required.

The Solution

The ECK case contains Cisco Enterprise routing and switching hardware, IP phones, and external access points. Built-in Category 18 LTE capability provides up to gigabit theoretical download speeds, but wireline or broadband services can be connected to provide secure communications where cellular is unavailable or congested. Specifically designed to be deployed in a field location, the ECK is ruggedized and can operate on external grid, generator, or inverter power. The portable rack-mount case has side handles and wheels for easy transportation via aircraft or automobile.

Secure Wired and Wireless Infrastructure

The core network of the ECK consists of a Cisco Integrated Services Router, which provides secure connectivity to private and public cloud applications, firewall capabilities, and telephony services using the built-in Cisco Unified Communications Manager Express (CME). Wi-fi services are provided by Cisco outdoor Access Points using the built-in Embedded Wireless Controller.

Benefits of the Cisco ECK

- Voice over IP - Standalone and PSTN Integration
- Data capabilities (internet, chat, email, file sharing)
- Wired and Wireless Data
- Power over Ethernet
- Security – Firewall and VPN tunneling
- Remote Monitoring and Management
- Ruggedized and portable
- Works with any Ethernet compatible connectivity source (BGAN, VSAT, etc) or cellular based technology (3G, LTE)
- Fully operational in 15 minutes, when pre-configured

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Why Cisco?

- Cisco is a recognized leader in providing products and solutions necessary to securely deliver essential communications services in times of crisis.
- Cisco’s strategy is to help customers connect, secure, and automate to accelerate their digital agility in a cloud-first world.
- Cisco connects people with world-class, enterprise grade collaboration tools. We connect users with devices, applications, and data with industry-defining networking and compute technology.
- Cisco serves 98% of the Fortune 500 and Cisco security solutions can secure any user, on any device, on any application.

Learn More

For more information about the Cisco Crisis Response team, please visit our website https://www.cisco.com/c/en/us/about/csr/impact/cisco-crisis-response/incident-response.html or send email to crisisresponse-info@cisco.com.

The Cisco Emergency Communications Kit can support multiple data connections including LTE or any Ethernet compatible platform, such as the broadband global area network (BGAN) or a very small aperture terminal (VSAT) device.

With reliable access to a cellular service or a backhaul solution the ECK allows multiple users to make calls, access the Internet, share files, and check emails simultaneously, over local wired or Wi-Fi connections. The VoIP solution allows for local wired Power over Ethernet (PoE) IP phones running as a standalone solution, which provides additional call survivability and local phone system integration opportunities. When combined with the use of the cloud Webex Calling platform or a centralized Cisco Unified Communications Manager, it can significantly reduce satellite and cellular toll charges. The solution can be configured to leverage SIP trunks using Cisco Unified Border Element (CUBE). The CUBE functionality can also be configured as a Public Switched Telephone Network (PSTN) gateway to provide off-net, or VoIP to PSTN, call support. The PSTN gateway functionality can be located at headquarters for all remote devices to connect back to, or it can be local to the kit.

Who Needs the ECK?

The ECK has been deployed by first responders, defense, and relief agencies around the world. It was designed as a suitcase-sized "network in a box" to address the challenges faced by many disaster relief agencies, operating in areas severely lacking telecommunications infrastructure. Daily operations in austere environments, such as those experienced by the Energy sector, and any organizations concerned about business resiliency, in times of crisis, would benefit from the ECK. Customers who prefer traditional Cisco Enterprise networking versus cloud-managed solutions will also benefit from the ECK.

Based on Cisco’s commercial off-the-shelf and 3rd party products, Customers or Cisco Partners can assemble a custom kit to meet mission-specific needs. The Cisco Crisis Response team has a limited number of loan kits, available to fulfill communication needs during the acute phase of emergencies.

Scalability and Optional Capabilities

An Integrated CME platform offers flexibility with multiple options:

- Standalone local telephone when no internet is available
- Integration with existing enterprise Cisco Unified Communications or IP-enabled 3rd party PBX deployments
- Scalable to hundreds of IP phones per kit

To achieve the maximum distance, mobility, and interoperability, Land Mobile Radio over IP (LMRoIP) capability can be integrated to enable an IP phone to “call” a radio and allow disparate radio systems (VHF, UHF, 800 MHz, trunked or conventional, etc.) to talk to each other.

Video Conferencing, analog phones and other collaboration capabilities can easily be added to the solution.