The PacStar 4100 is a JITC-certified, portable communications package that supports tactical personnel during an operation's initial entry period. The PacStar 4100 provides critical voice and data connectivity prior to the installation of more permanent communications capabilities. Built with Cisco technology and PacStar’s IQ-Core® Software, the system provides satellite connectivity to the Internet and the DISN (Defense Information Systems Network).

The system's enclave routers are certified to provide access to SIPRNet, NIPRNet, JWICS and CENTRIXS networks, and may be configured for the classified-over-unclassified tunneling or for colorless core configurations.

The system uses LAN, satellite, VoIP, and analog phone technologies, all integrated into an easy-to-use package. The core router has (8) data/VoIP ports and (4) analog phone ports, with more data/VoIP ports on the two enclave routers. Each unit has a BGAN satellite modem for remote broadband access.

PacStar’s system management software, IQ-Core Software, simplifies system setup and management, protects the system from misconfiguration by preventing many operator errors, and reduces training and support requirements.

**Features**
- JITC-certified solution
- Ultra-lightweight laptop with automated system management using PacStar IQ-Core Software
- (3) Cisco routers for convergence and concurrent or non-concurrent access to NIPRNet and SIPRNet
- Cisco Unified Communications Manager Express for call processing
- BGAN broadband satellite modem
- LAN or satellite backhaul
- (2) Cisco VoIP phones
- Analog phone support
- AC/DC power-conditioning power supply for worldwide power support
- Cases meet airline carry-on rules
- Units tested to MIL-STD-810F vibration, shock, and environmental standards

**Laptop: Panasonic Toughbook**
- Ultra-lightweight, 3.0 lbs.
- Windows® XP® Professional
- Intel® Core™ 2 Duo Processor
- Lithium ion battery pack, long life

**PacStar IQ-Core Software**
- Integrated system management software providing a simplified, unified, user interface
- Wizards automate key management functions to simplify setup and operation, and to reduce errors
- Reduces training and support requirements
- Enables system management by non-technical users
- Dashboard view of status of devices, device temperatures, transmission, status of router interfaces, and system events
- Setup and management of phones
- Management of devices, including console access and password changes
- Monitoring of devices, with alerts
- Setup and management of LAN and satellite backhaul (transmission)
- Management of device configurations
- System event logging and reporting
- Highly efficient remote management protocol
- Designed from the ground up for net-centric computing
- Award-winning, PDF-based, user documentation
- Context-sensitive, PDF-based help

**Routers: Cisco® 1861 Integrated Services Router (3 units)**
- All-in-one UC (Unified Communications) solution that integrates voice, data, video, and security into one platform
- Integrated, managed Ethernet switch provides (8) ports of 10/100 Power-over-Ethernet (PoE)
- Two enclave routers provide more data/VoIP ports
- (4) built-in FXS ports on core router for analog voice calls
Cisco Unified Communications Manager Express 7.0
- Call processing software on core Cisco 1861 router
- VoIP and analog phone support
- License support for up to 15 phone users
- Integrated voicemail and auto-attendant solution with Cisco Unity Express
- Extensive trunking support including H.323 and SIP trunking

Satellite modem: Thrane & Thrane EXPLORER® 500
- High-speed satellite IP communications
- Broadband mobile terminal with integrated antenna
- Global coverage through Broadband Global Area Network (BGAN) satellite service, which offers Internet and public phone system access
- Simultaneous voice and data to access applications and phone calls at the same time
- Streaming IP at speeds up to 128 kbps for guaranteed QoS

Cisco® Unified IP Phone 7911G (2 units)
- 10/100 BASE-T Ethernet connection through (2) RJ-45 ports, one for the LAN connection, and the other for connecting a downstream Ethernet device, such as a PC
- Signaling protocol support: Supported in Cisco Unified Communications Manager Versions 3.3(5)SR2, 4.1(3)SR3a, 4.2(1)SR1, and higher using Skinny Client Control Protocol (SCCP); supports both SCCP and Session Initiation Protocol (SIP) with Cisco Unified Communications Manager Version 5.0(2) and higher
- Codec support: G.711a, G.711, G.729a, G.729b, and G.729ab audio-compression codecs
- Configuration options: Provisioning of network parameters through Dynamic Host Configuration Protocol (DHCP)
- Voice quality: Comfort-noise generation and voice-activity-detection (VAD) programming on a system basis
- Works with Cisco PoE from any Cisco inline power-capable switch and can also receive power from IEEE 802.3af-compliant blades

Custom power-conditioning power supply
- 400W
- Supports power input of 90-264V AC 47-63hz and 10-36V DC
- Accepts AC and DC input with auto-sensing, auto-switching support
- Absorbs power surges while maintaining correct voltage output

Hardigg Storm Case® iM2400 and iM2500
- Briefcase style
- 35 lbs. gross weight per case
- iM2400: 19.2 x 15.2 x 7.3 in
- iM2500: 21.7 x 14.1 x 8.9 in
- iM2500 has wheels and a pullout handle for easy transportability

PacStar 4100 Options
N.E.T. VX400 Mobile VoIP Interface Bundle
- Mobile Voice over IP (VoIP) network device
- Designed to extend analog voice, VoIP (SIP/H.323) and Secure Calling (STU/STE/SCIP) across IP-based networks (i.e., IP LAN, IP WAN, IP/ISDN, VSAT, BGAN) in a network configuration using a unique VoIP optimization technique (called BSP/VTP) that reduces the bandwidth per call required and reduces the number of packets required to transport VoIP calls between remote/local devices.
- This configuration is known as the PacStar 4100-W

ViaSat® AltaSec® KG-250X HAIPE INE
- NSA Type 1 approved for encryption at TS and below
- HAiPE 3.0 support
- Expanded operational temperature range (up to 60°C)
- Throughput up to 100 Mbps (bi-directional total 200 Mbps)
- F1 compliant and Suite B support

Harris SecNet 54 EMOD HAIPE INE
- NSA Type 1 certified encryption for bulk IP encryption, providing INE remote access for all required classified networks (SIPRNet, CENTRIX-ISAF, JWICS, secure NIPRNet, etc.)
- Smallest available certified HAIPE INE, reducing equipment SWaP
- Proven performance in deployable kits, fully interoperable with other INEs commonly installed in teleport/reachback sites

Case Option
- Optional Pelican™ 1560 suitcase style hard case with wheels and pull out handle for commercial airline baggage transport of the core components - with custom foam - measuring 22.06” x 17.93” x 10.43”

Intellectual Property
- Pacific Star Communications, Inc. products are protected by US patent number 7,535,861 and number 7,817,589
- Additional patents pending