CHELTON





Chelton Tactical Gateway Interface (TGI) is a robust IP communication device designed for tactical networks. The device can be used for several purposes, such as SIP phone, router, and SHDSL modem, which makes it highly versatile for various field/tactical communication needs.

VoIP Service can be run on the device to provide telephony and SIP server functionalities to other VoIP devices for accessing the VoIP network.

The device can run various services, such as messaging service and dynamic routing. The device can also be used as a platform for third-party services.

FOR MORE INFORMATION, PLEASE CONTACT: marlow.marketing@chelton.com

Benefits

- The same device acts as a terminal, switch and router
- Small and rugged form factor easy to install anywhere and truly portable in the field
- Extensive connectivity with e.g. CNR interface, SHDSL, LAN, USB, WLAN, BT
- Full military grade IP communications with distributed VoIP service and wide range of codecs
- Dynamic routing capabilities improving network reliability

Use case examples

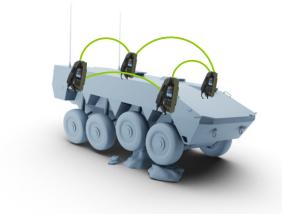
- Rugged VoIP phone in military vehicles or in the field
- Rugged field phone with SHDSL modem, VoIP Service integrated
- Blue force tracking application for legacy CNR radio
- Gateway between CNR radio network and VolP service
 SHDSL network access point
- Fully independent tactical IP network using SHDSL and Ethernet connections

Tactical Gateway Interface Use case examples

Rugged VoIP Phone in the field for wired (SHDSL/ETH) and wireless (WLAN) connections



Intercom usage with integrated VoIP Service



Blue force tracking application for legacy CNR radio







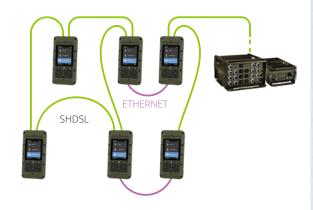
Gateway between CNR radio network and VoIP service



SHDSL network **access point**



Fully independent **tactical IP network** and interoperability with tactical IP networks





Tactical Gateway Interface Specifications

functions either by direct dialing codes

Features

- VoIP Service functions either by direct dialing codes or from the graphical user interface
- > Custom OLSR in tactical networks
- > OSPF/BGP for external connections
- > Automatic IP address configuration
- QoS: traffic classifying and priority queues
- Supports connectivity to 3rd party SIP servers.
- LDAP phonebook, either directly loaded to device memory, or used remotely over selected network
- Linux firewall and Linux user management system, all users can have their own user ID's
- > Push-to-talk (PTT)
- No service requiring parts such as battery inside the unit
- > On/off-hook detection

Device management

- Web user interface for device configuration
- > Easy and quick setup of multiple devices via configuration file
- Remote SW update
 Software upgrade through web-based management
- Remote management support via Network Manager
- Representational State Transfer over https (REST-API)

Physical interfaces

- Power 12– 32Vdc
- Audio/serial
 Audio interface for connecting
 handset/headset/CNR, incl. two serial
 ports and push-to-talk signals
- LAN Two 10BASE-T/100BASE-TX interfaces with PoE 802.3af input
- USB
 USBv2.0 host port and USB power input
- SHDSL Two ITU-T G991.2 (G.SHDSL) interfaces, push-and-release connector for field wire

Wireless interfaces

- > GPS
- › WLAN 802.11 bgn
- > BT 3.0 for headset (Hands-Free Profile)

Device interfaces

- › Status LED
- Display Large, TFT LCD full color display Size: 3.5 inches diagonal Resolution: 320 x 240 pixels
- Keypad
 2 function keys below the display,
 12 number keys
- Buzzer
 Buzzer for ringtone

Technical specifications

- Signalling protocols
 SIP (RFC 3261) over UDP/TCP/TCP-TLS
 SDP (RFC 4566)
 Presence event package (RFC 3856)
- Voice signaling RTP/RTCP (RFC 3550) Telephone events (RFC 2833)
- Phonebook
 LDAP (RFC 451)
- Audio codecs
 G.711, G.729AB, GSM, Speex,
 MELPe 2400
- Environmental and EMC standards MIL-STD-810G MIL-STD-461F MIL-STD-1275E
- Power supply Power consumption 7W (device), max. 7.5W USB power feed Power input 12– 32 VDC, alternative power inputs are LAN (PoE) and USB
- Operating temperature range
 40 °C / +55 °C
- Ingress protection class IP67, also for open connectors
- Dimensions 183 x 90 x 30 mm, without handset and handset holder
- Weight
 580g, without handset and handset holder
- Material
 Surface treated aluminum alloy/plastic
- Declaration of conformity CE

Accessories

- > Handset
- > Handset holder
- › Headset
- > Wall mount
- › Cables
- > Audio Extension
- Tactical Power Pack

Product code: Z170X

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