



Bittium Tough VoIP Terminal™



Bittium Tough VoIP Terminal is a fully integrated wireline IP phone that can be either operated as part of Bittium Tough VoIP solution or as VoIP terminal together with third party equipment.

The Bittium Tough VoIP Terminal offers wide range of functions and can be configured to suit many critical applications requiring high service availability with extreme environmental protection.

The user interface of the Terminal has been developed with one thing in mind: simplicity. Menu structure is simple and the most used functions can be configured as hotkeys. There's no need for configuration, user can just plug the unit in and start communicating. Dynamic real-time phonebook keeps track of other users you can connect to with a push of a button.

Like all the Bittium Tough VoIP units, also the Terminal is able to maintain the voice services in tactical operation mode where network services have been lost. The Terminal is a self-healing and self-configuring unit, which automatically and transparently adapts to the available network services. The Terminal is not dependent on the availability of network services, such as SIP or DHCP, thus enabling access to voice and data services regardless of the network service status.

Benefits

- › Zero configuration
- › Can operate independently without SIP server in a tactical mode
- › No service requiring parts, such as battery inside terminal, powered through Power over Ethernet (PoE)

Applications & installations

- › Infantry communications
- › Vehicular and weapon platforms
- › Naval applications
- › Airbases
- › Command posts
- › Shelters
- › Service depots
- › Field hospitals

FOR MORE INFORMATION, PLEASE CONTACT:

defense@bittium.com

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Specifications

Features

- › Full Push-to-talk (PTT) functionality with intelligent functions for enhanced usability and advanced group calls
- › No service requiring parts such as battery inside the terminal, powered through Power over Ethernet (PoE)
- › Connects to Bittium Tough VoIP or to PoE supporting Ethernet system
- › VoIP calls through SIP server or terminals; can operate independently without SIP server in a restricted mode
- › Dynamic phonebook containing a list of existing and available network users
- › Auto-answer mode while using headset, providing totally handsfree answering
- › Buzzer to alert the user of incoming call when not wearing a headset
- › Standard phone features including quick calls, number dials and phonebook
- › Terminal specific user's operational role definition
- › Additional options for software configurable feature sets for special customer needs including network management, role definitions, use of special applications etc.
- › Automatic adjustment of the display and keypad lightness for optimal use in the prevailing conditions. Suitable for operating in total darkness.

Interfaces

- › Ethernet with Power over Ethernet (4-wire PoE):
 - › M12 D-coded panel mount connector
 - › 100Base-T Ethernet
 - › Maximum input power of 12.95 W (350 mA @ 37 V)
- › Headset connection U-183/U

Display

- › Large, crystal clear and robust OLED display
- › Size: 2.7 inches diagonal
- › Resolution: 128 x 64 pixels

Keypad

- › ITU E.161 keypad
- › Arrow keys for menu browsing
- › Confirm and cancel buttons
- › PTT (Push To Talk) button on the side
- › Keypad lock

Technical specifications

- › Fully integrated IP phone software solution
- › **Standard networking support**
IPv4, TCP, UDP, ICMP, ARP
- › **Management and control**
Web-based management
- › **VoIP protocol stacks**
SIP (RFC 3261, RFC 3265, RFC 3515, RFC 3264, RFC 2782 and RFC 3428)
SDP (RFC 2327) – RTP/RTCP (RFC 3550)
Adaptive Jitter buffer
DHCP option for SIP (RFC 3361)
DNS support for SIP
- › **Voice codecs**
G.711; G.729 A/B
- › **Remote SW update**
Manual software upgrade through Web-based management
- › **Telephony applications**
Multi party conferencing by SIP server
Multi party push-to-talk without server
Point-to-point call without server
Dynamic address book
- › **Ingress protection**
IP65
- › **Operating temperature range**
-40 °C/+55 °C
- › **Dimensions**
L 213 × W 84 × H 43 mm
- › **Weight**
447 g
- › **Quality standards**
ISO9001
AQAP 2110
- › **Declaration of conformity**
CE

Accessories

- › Headset 3M™ PELTOR™ ComTac XPI MT20H682FB-33

This product is covered by at least one of the following patents and patent applications: US8468382, EP08761648.8, CA2719285, IL209153