Viasat

BULLDOG
Mobile Self Powered Secure
Communications Crypto Device[1]

The Bulldog is a PRIME Layer 3 IP capable of Suite A & B operation, providing the ultimate protection for data in transit when used in conjunction with COTs devices ranging from Laptops, Tablets and Smartphones.

The small form factor units are available in two formats, SoHo(Small Office Home Office) & Wi-Fi, that are fully self-powered, giving the end user complete flexibility and ability to apply it to a wider scenario of use case applications targeting tactical data sensitive requirements.[2]

The SoHo unit with RJ45 port provides a physical wired connection to the COTs device and the network/router.[3]

The Wi-Fi unit with USB connection provides a physical wired connection to the COTs device and the dual 2.4Ghz or 5Ghz wireless connection is configurable to WAN/LAN WIFI or Hotspot.[4]

Viasat can incorporate the Bulldog into a wide range of secure mobility solutions.[5] Whether working from home, remote offices or in temporary field locations there is an imperative for assured, network resilient, secure communications and information systems to connect government officials, military commanders and responders. In all cases, without the need to compromise on security or comply with restrictive operational procedures, data in transit requirement can be met be it voice, video or data transfer.

Bulldog Key Features

SMALL FOOT PRINT
The small form factor 'light weight' design makes it easier to 'bolt' on to COTs devices.

INTEGRATED BATTERY
Independently powered, no need for an external power source or use power from the COTS host device.

WORKS ANYWHERE
Fully configurable roaming infrastructure with peer-to-peer capability or hub-mesh-spoke setup. End point discovery, utilizing PTS (Peer Topology Server) and Enhanced NAT.

REMOTE UPGRADE
Fully manageable remotely including encrypted wireless / Wi-Fi updates.

EASY TO USE
Most important is the user experience, simple plug and play design.

REMOTE ENTERPRISE MANAGEMENT
Administrators can create permanent or temporary manageable profiles, clusters or communities to allow team internal or external inter-agency operation.

WIDE OS COMPATIBILITY
Compatible with Apple™ iOS, Android™ and Windows™ devices.

WIDE H/W COMPATIBILITY
Works with other PRIME compliant gateways and is compatible with a wide variety of COTs end user devices.

[1] NCSC CAPS validation pending and in process

[2] See Viasat Secure Mobility White Paper March 2020

[3] See Viasat Secure Mobility White Paper March 2020

[4] See Viasat Secure Mobility White Paper March 2020

[5] See Viasat Secure Mobility White Paper March 2020

Specifications

Security Algorithm	HMG Sovereign PRIME Suite A [6] & Suite B up to TS (ACCSEC when not in use)
Protective Marking	Up to TS (OFFICIAL ACCSEC when non-operational)
Security Authentication	Two factor Physical
PRIME Support	BASE – IKEv2 PSK NAT E-NAT [7] PTS Node PT/CT Server and Client DHCP Community Separation (CCOI) Advanced Network Features: DSCP, TFC, DHCP relay
Cryptographic Ignition	Local CIK
Protocols	IPv4 & IPv6 [8]
Capacity	64 SAs [Duplex]
Bandwidth	SoHo 40 Mbps (Black Housing) Mobile 24 Mbps (White Housing)
Management	Remote management PT and CT [partial OTAK] re-keying SNMPv3 PRIME MIB and Bulldog Enterprise MIB Audit and accounting Field re-programmable
Captive Portal	Tethered and WiFi – concurrent mode

INTERFACE

Soho – Black Housing Wired solution	› PT & CT Ethernet 100BaseT RJ-45 › PT USB 2.0 slave, CT Micro USB charge › Multi-function connector providing USB PT charge & UCIK interface.
Mobile – White housing Wifi solution	› PT USB 2.0 slave › CT Micro USB expansion [100BaseT] [9] › CT WiFi 802.11 b/g/n 2.4, 5 GHz; 802.1x EAP-TLS, PEAP

PHYSICAL SPECIFICATIONS

SoHo – Black Housing Wired solution

› Size (H × D × L)	17mm × 73mm × 133mm
› Weight	230 g
› Power Source	9VDC Internal battery
› Power Consumption	2.3 W

Mobile – White housing Wifi solution

› Size (H × D × L)	14mm × 73mm × 133mm
› Weight	185 g
› Power Source	9VDC Internal battery
› Power	2.5 W

ENVIRONMENTAL

Operating temperature	-20°C to +55°C
Storage temperature	-25°C to +65°C

[6] Planned capability

[7] E-NAT capability is demonstrable

[8] IPV4 AND IPV6 available on CT interface, planned IPV6 PT Interface

[9] Future expansion

[10] Selective tests

[11] In evaluation

Bulldog Wi-Fi

Bulldog SoHo