AEGIS ATOM
The world's first bonded MiFi router

The compact, next generation smart bonded router provides an instantly available, fast, stable and secure broadband data connection, for bonded broadband use on the move.

Enabled with the latest 5G and Cat 12 LTE technology, the Atom is small enough to be carried in a pocket, day sack or laptop case. Incorporating an internal battery, USB C charging, and user-friendly interface.

Atom is the world's first portable bonded broadband router (MiFi), providing an instantly available, fast, stable, and secure broadband data connection for an individual or small user group.

Specifically designed for bonded mobile broadband connectivity, the compact router weighs just 0.6kg. Atom can be used as a desktop router but is also compact enough to be carried in a pocket, small bag or laptop case.

Designed for simple, rapid deployment, Atom is a self-optimising system requiring no user configuration or training. It uses the latest in IPsec VPN technology to enable highly encrypted bonded broadband connectivity.

Connected Configuration

Atom accesses global bonded SDN via our Fusion bonded application which runs on the Atom router, providing a secure and stable broadband connection anywhere.

Although the Atom is connected to the local networks, the user devices connected to the router are clients of a private network between the Atom and the exit node. The connected devices are therefore cryptographically isolated from the public infrastructure and can only be seen from inside the private network (SDN).

The data generated by the connected client devices (e.g chat, video, voice, browsing, email) is encrypted by the Atom then scattered across its multiple 5G/LTE connections.

Once received by the nominated exit node, the client data is reconstituted and forwarded to either a private client network, or to the Internet via a 'trusted' gateway.

Atom is a quad SIM (2 x physical, 2 x eSIM) device which uses Multi IMSI SIM technology to access any available cellular networks.

Specification

3.1. CPU & Memory
- Broadcom BCM2712, quad core Cortex-A76 (ARMv8) 64-bit SoC @ 2.4GHz64-bit Architecture
- RAM - Options for 2GB, 4GB, or 8GB LPDDR4-4267 SDRAM with ECC
- SSD - 16GB eMMC standard, 32GB / 64GB upgrades on request.

3.2. LTE/5G Modem-RF System
- 1 x Semtech (Sierra Wireless® AirPrime®) EM Series 9293 or 1 x Quectel RM520NGLAA
- 1 x Sierra Wireless® AirPrime® EM Series 7465
- 5G SA data rates: 2.4Gbps (DL) / 900Mbps (UL)
- 5G NSA data rates: 3.4Gbps (DL) / 550Mbps (UL)
- Cat 12 - 600Mbps DL/150Mbps UL
- Certification - CE, FCC, GCF, IC, NCC, PTCRB
- Carrier Certification - AT&T, Bel, Rogers, Sprint, Telus, US Cellular, Verizon, Vodafone

3.3. I/O Interfaces
- 1 x USC C High Speed Data
- 1 x USB C Power Support
- 2 x physical SIM Slots

3.4. Operating system
- Open WRT
- SE Linux compliant

3.5. Power Supply
- DC input - USB C - 5VDC@4A
- Battery - Internal 3.6V, 6Ah
- Certification - UN38.3 certified for safe transport.
- Charging - USB C charging, compatible with laptop/smartphone charging cables.

3.6. Physical
- Dimensions - 100mm x 100mm x 35mm
- Weight - 0.6kg (including battery)
- Mounting - Pocket, day bag, laptop bag or desktop

3.7. Environmental
- Operating temperature -32 to 140°F / 0°C to 60°C
- Storage temperature -40°C to 85°C
- Humidity - 10% to 90%, non-condensing
- Certification - CE/FCC Class A
- RoHS compliant Microsoft Azure certified, REACH

3.8. Default Wi-Fi Access Point
- Standards - 802.11 a/b/g/n/ac Dual Band 2.4Ghz and 5Ghz
- Max data rate - 600Mbps

3.9. Security As Per NCSC Guidelines
- Prime Cryptographic Profile
- Encryption - AES 256 CBC
- Pseudo-random function - HMAC-SHA-256 (RFC4868)
- Diffie-Hellman Group - 256bit random ECP (RFC5903) group 19
- Authentication - ECDSA-256 with SHA256 on P-256 curve
- Management - Dedicated zero tier management network