

TRANSPORT AGGREGATION GATEWAY (TAG)

Next Generation Smart Blending Technology for enhanced, reliable and resilient connectivity

L3Harris Transport Aggregation Gateway (TAG), powered by Dejero, provides assured communications in Denied, Degraded Command and Control Environments (D2C2E). Through artificial intelligence and machine learning, our enhanced algorithmic Smart Blending Technology (SBT) delivers dynamic load balancing, enhanced quality of service and multi-path diversity. By utilizing all available communications links simultaneously, TAG automatically optimizes capacity by providing network resiliency and elasticity as communications systems join or leave the network.

PRODUCT DESCRIPTION

In order to counter near peer adversaries, TAG provides transportation diversity to combat enemy electronic warfare (EW) threats ever-changing communications environments while ensuring seamless blending of disparate network links.

The Gateway and Concentrator are key components of TAG. The Gateway, located with the remote terminal(s), manages inbound data links and applies SBT algorithms to determine optimal network(s) for outbound data flow.

The Concentrator applies SBT algorithms to aggregate traffic for data integrity. In addition, the Concentrator passes configuration and status information between the Gateway and Centralized Manager. TAG supports links of different data rates and latencies; ensuring message delivery receipts despite lapses in satellite connectivity or equipment failures.

TAG SBT implements load balancing, QoS improvement, and data aggregation with enhanced security. It negotiates between the Gateway and Concentrator to asynchronously calculate forward and return link metrics to utilize full bandwidth by providing dynamic communications through agnostic transport link aggregation. SBT monitors each link in real-time and makes traffic flow decisions on a per-packet basis. This advanced technology enables a single data stream to utilize multiple links at once for higher data integrity.

TAG algorithms predict link quality and proper forward error correction to balance reliability with the least amount of overhead. Furthermore, TAG enhances existing routing and SD-WAN solutions and is not an 'either / or' requirement as SBT enhances SD-WAN. With TAG, L3Harris has upgraded proven commercial software to create secure, resilient technology that gives the Warfighter assured communications despite shifting networks.



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Dynamic, Automated Primary,
Alternate, Contingency,
Emergency (A-PACE)
Communications at all Echelons

KEY FEATURES

- > Packet-based transmit and receive; individual packet dissemination—enhanced throughput and security
- > Available as software only solution
- > Aggregates bandwidth, for example: three (3) links with a 10Mbps enables a 30Mbps connection
- > Connects diverse Line of Sight (LoS), Cellular and Beyond Line of Sight (BLOS) Communications into the same end user workstation
- > Provides automated Load Balancing over multiple networks—true resilient communications
- > Supports enhanced Quality of Service (QoS) by optimizing network traffic over optimal links



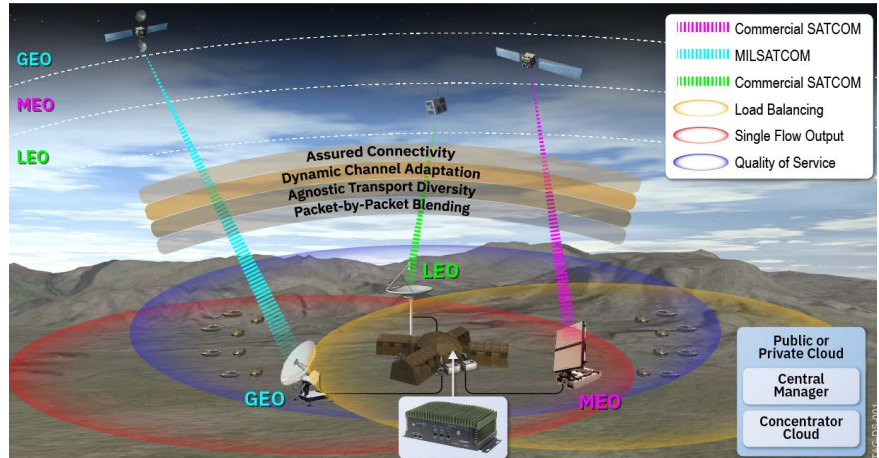
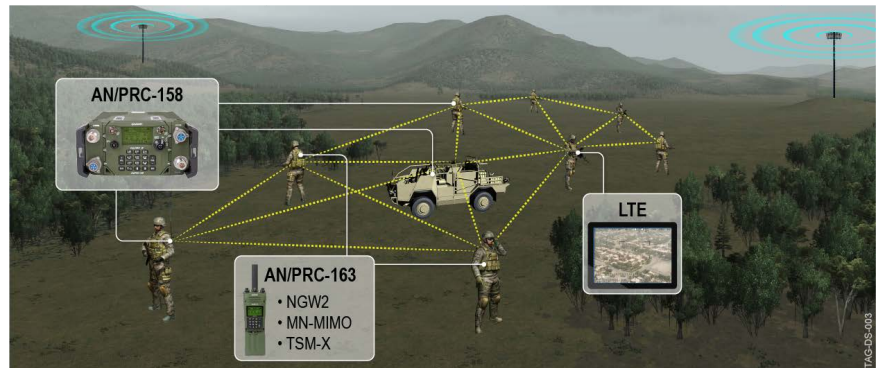
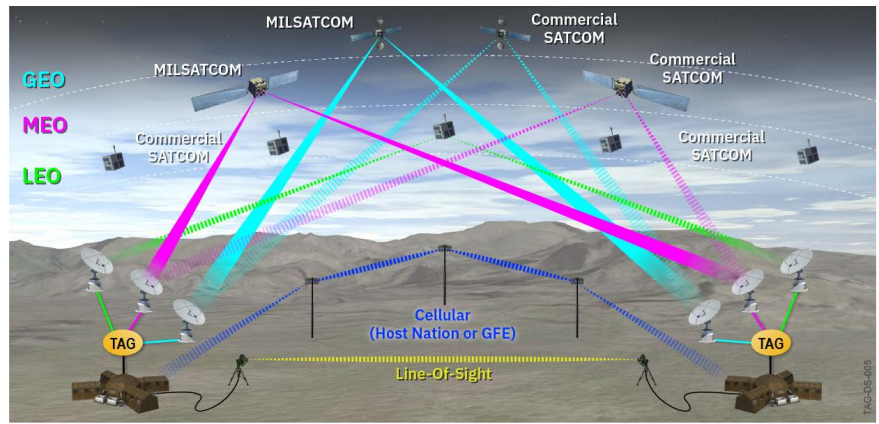
Optional M212 Chassis



Ruggedized M6E6 Gateway

NETWORKS SUPPORTED

- > Beyond Line of Sight (BLOS)
 - Geo-synchronous Earth Orbit (GEO)
 - X-Band
 - Ka-Band
 - Ku-Band
 - S-Band
 - Medium Earth Orbit (MEO)
 - Ka-Band
 - Ku-Band
 - O3B
 - Low Earth Orbit (LEO)
 - Ku-Band
 - Starlink
- > Line of Sight (LoS)
 - High Capacity Line of Sight (HCLOS)
 - Tri-band Line of Sight (TRILOS)
 - Associated Wide Band Networking Waveforms
- > Cellular
 - 2G/3G
 - LTE
 - 5G
- > Layer 2 tunnel is formed between the GateWay and Docker LAN sides
- > Layer 3 services required on the Azure Docker for Layer 2 tunnel:
 - DHCP server
 - NAT + IP routing
 - TCP and UDP port forward rules



SPECIFICATIONS

HARDWARE	M212 GATEWAY	M6E6 GATEWAY
Cellular Connections	Up to 3 x 3G / 4G / LTE / LTE-A / FirstNet	6 x 3G / 4G / LTE
Ethernet Ports	4 x 1Gb/s ports for LAN (2 x PoE) 1 x 1Gb/s port for WAN	6 x 1 Gb/s ports for LAN, WAN connections including SATCOM
Control	Cloud Management Portal	Front panel dial and power switch; Setup and monitoring via remote Control
Power Supply	9-36 VDC	100-240 VAC, 50-60 Hz
Power Consumption	100W	100W
Dimensions (HxWxD)	26.42 cm x 10.64 cm x 15.62 cm (10.4" x 3.8" x 6.1")	1U short-depth 19" rackmount 4.4 cm x 42.7 cm x 24.9 cm (1.7" x 16.8" x 9.8")
Weight	4.7 kg (10.4 lbs.)	4.2 kg (9.2 lb.)
Operating Temperature	-20 °C to 60 °C (-4 °F to 140 °F)	-10° C to 50° C (14° F to 122°F)
Interfaces	5x RJ45 (Ethernet), 6 x SMA (LTE-A), 6 x SMA-RP (WiFi), 2 x USB 2.0, 4 x USB 3.0	6 x RJ45 Ethernet, 12 cellular antennas, 1 x GPS antenna, 2 x Wi-Fi antennas

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1025 W. NASA Boulevard
Melbourne, FL 32919
t 833 537 6837
CSW.Products@L3Harris.com