

Xatellite ST2

Industrial Grade Rugged Palm Size 5G CPE



BGP4+ Available

With the powerful Quad-Core ARM V8 CPU and Dedicated Network Processing Unit Acceleration in place, BGP4+ is now at your disposal.

Across network Overlay pure L2 or L3 tunnel

Pure L2 or L3 tunnels covered by the network have the advantages of improving efficiency.

Palm size CPE

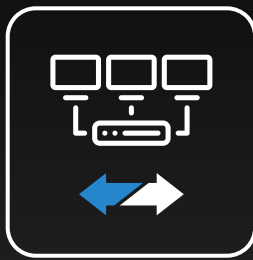
The ST2 is a compact 5G CPE ideal for various industrial environments with space constraints.



Aluminum Alloy Cover

Designed for use in various complex indoor industrial environments, it provides high-performance connectivity to end devices.

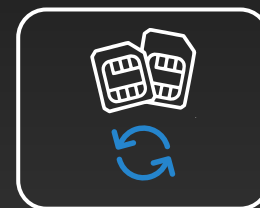
SD-WAN Ready



Enhance your SD-WAN deployment with the power of Multi Ethernet WANs, 5G/LTE, and Wi-Fi WAN. You can leverage all available WAN connections to ensure uninterrupted connectivity and keep your business operations running smoothly.

Network Bonding, Failover

Bonds multiple networks together to create higher bandwidth and switches between connections within milliseconds for low latency and safe operation.



SDM Central Management

It supports centralized device management with multi-tenant mode, allowing for efficient management of devices across multiple locations or branches.

Use Cases



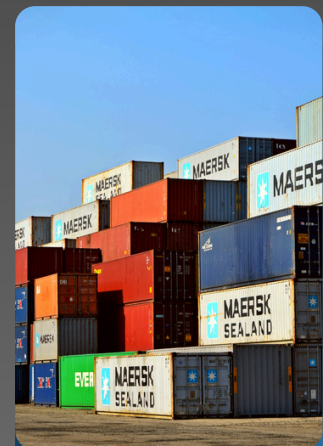
Vehicle



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Factory Manufactures



Logistics

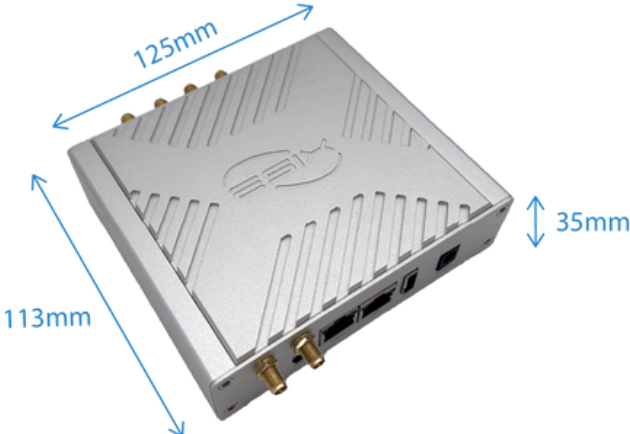
CELLULAR NETWORK

Communication Standard:	4G LTE Transmission Rate:
3GPP Release 16 NSA/SA operation Sub-6 GHz	CAT-19 Downstream 1.6 Gbps CAT-18 Upstream 200 Mbps
Applicable Network :	Network Frequency Band:
5G NR SA, 5G NR NSA LTE-FDD, LTE-TDD, WCDMA	5G: N1/N2/N3/N5/N7/N8/N12/ N13/N14/N18/N20/N25/N26/ N28/N29/N30/N38/N40/N41/ N48/N66/N70/N71/N75/N76/ N77/N78/N79 4G: B1/B2/B3/B4/B5/B7/B8/ B12/B13/B14/B17/B18/B19/B20/ B25/B26/B28/B29/B30/B32/ B34/B38/B39/B40/B41/B42/ B43/B46/B48/B66/B71
5G NR Transmission Rate:	Antenna:
5G SA Sub-6: <ul style="list-style-type: none">Downstream 2.4GbpsUpstream 900 Mbps 5G NSA Sub-6: <ul style="list-style-type: none">Downstream 3.4 GbpsUpstream 550 Mbps	4 × 5G antennas (SMA)

Wi-Fi

Wi-Fi Standard:	Operating Frequency:
Wi-Fi 6 802.11 a/b/g/n/ac/ax	2412MHz ~ 2462MHz 5180MHz ~ 5825MHz
Transmission Rate:	Wi-Fi Connections:
2×2 MU-MIMO WiFi 2.4GHz radio Up to 574Mbps physical data rate 2×2 MU-MIMO WiFi 5GHz radio Up to 1210Mbps physical data rate	Max 512 × Wi-Fi connections (concurrently)
Modulation Technology:	Antenna:
802.11 b: DSSS (DBPSK, DQPSK, CCK) 802.11 a/g/n: OFDM (BPSK, QPSK, 16-QAM , 64-QAM) 802.11 ac: OFDM (BPSK, QPSK, 16-QAM , 64-QAM, 256-QAM) 802.11 ax: OFDM (BPSK, QPSK, 16-QAM , 64-QAM, 256-QAM, 1024-QAM)	2 × Dual bands Wi-Fi antennas (SMA)

TECHNICAL SPECIFICATION

Hardware	CPU: 64-bit Quad-Core ARM v8 NPU: Twelve-Threaded network processing unit Form Factor: Aluminum alloy waterproof case Mounting Option: 75 × 75 mm VESA mount I/O: 2 × GE RJ45 Ethernet ports (Including 1 × POE+ input port) 1 × Micro SD Slot 2 × Nano Sim slots (Single Pass, Single Standby) 1 × USB 2.0 port (ModBus, RS232/TTY) 1 × Reset / Factory Restore Button	Operating	Temperature: -35°C ~ 75°C -40°C ~ 85°C (Extended) Humidity: 5% ~ 95% non-condensing Temperature: -40°C ~ 85°C
Functions	Network Features: Support RIPv1, RIPv2, RIPng, OSPFv2, OSPFv3, BGP-4, BGP-4+, Policy-based Routing, NAT, PAT, BFD, MPLS, Multi-WAN, IPv6/IPv4 dual stack, SRv6, 802.1Q VLAN, VxLAN, STP, RSTP, MSTP, QinQ over IP, MQTT Broker, etc. APN: Support Frequency Locking, Network Slicing, Bridge Mode, 5G LAN Security: Support SIM PIN protection, Firewall, Mac address access control, IP address access control, MACsec, Wi-Fi Encryption authentication VPN: Support IPsec VPN, DMVPN, GRE, WireGuard, EVPN-VXLAN, IPfiber(L2 overlay) GNSS: Support GPS, Beidou, Galileo(Optional) Administrator maintenance: SNMP, SSH, WebUI, SDM (Cloud Central Management)	Storage	
		Ingress Protection Rating	IP41
		Power input	(1) Standard DC-044A 5.5 × 2.1mm DC Jack input 24 ~ 56V DC (2) IEEE 802.3 AT PoE+ Available adaptors - 24V/2A adaptor (default) - POE+ injector (optional)
		Power Consumption	8.5W: WiFi6 Off, 5G module On (no data flow) 16.5W: WiFi6 On, 5G module On (iperf3 via WiFi6 & 5G Modem)
		Weight (body):	≈ 690g
		Dimension	125 × 113 × 35mm
Performance	Routing throughput (Max) : 4Gbps IPSecVPN throughput (Max) : AES-128-SHA1: 420 Mbps AES-256-SHA256: 380 Mbps IPfiber throughput (Max) : Standard Encryption (AES-128-GCM-SHA256): 640 Mbps Enhanced Encryption (AES-256-GCM-SHA384): 440 Mbps MACsec throughput (Max) : GCM-AES-128: 730 Mbps GCM-AES-256: 710 Mbps		
There might be colour aberration between picture and each existence			

ORDERING INFORMATION



SKU	Packing List
X5125-50-102-48W-D (Reference: Xatellite ST2)	SKU: X5125-50-102-48W-D - Xatellite ST2 router body - Single 5G Module inside - SMA Wi-Fi Antenna (EA-S-W) × 2 - SMA 5G/4G/GNSS Antenna (EA-S-5) × 4 - AC/DC Adapter, 24V DC/2A - DC Jack (EP-D-24D) × 1 *PoE+ Injector is not included.
Accessories	
EP-P-30R	PoE+ Injector 30W
EP-D-12D	AC/DC Adaptor, 24V DC/2A - DC Jack
EA-5M-2	External Waterproof 5G Mushroom Antenna (2 meters)
EA-5M-3	External Waterproof 5G Mushroom Antenna (3 meters)
EA-S-W	SMA Wi-Fi Antenna
EA-S-5	SMA 5G/4G/GNSS Antenna

*Any special requirements, please contact to sales representative.

STANDARD HARDWARE/SOFTWARE WARRANTY POLICY

eSIX warrants solely to the original end-user purchaser ("Purchaser") that hardware ("Hardware") purchased from eSIX or our Authorized Partners will be free from defects in materials and workmanship when used within the limits set forth in the documentation (data sheet and user manual) for a period of twelve (12) months, starting from the time of shipment of the Hardware, or the date the Hardware was purchased according to sales registration, whichever is later. (If a 36-month warranty is required, please contact the sales representative.)

This limited warranty is non-transferable and extends only to the original end-user purchaser who acquired the Hardware from an Authorized Partner who has the right to sell in the end-user's territory. eSIX explicitly disclaims any warranty obligations for Hardware that is sold outside of the assigned territory of an Authorized Partner. Your exclusive remedy and eSIX' entire liability under this limited warranty will be for eSIX, at its option, to (a) repair the Hardware with new or refurbished parts, or (b) replace the Hardware with a reasonably available equivalent new or refurbished eSIX Hardware. Any repaired or replacement Hardware will be warranted for the remainder of the original Warranty Period or thirty (30) days, whichever is longer. All Hardware and parts that are replaced become the property of eSIX.

EXCLUSION AND LIMITATIONS

This limited warranty does not apply if: (a) the Hardware assembly seal has been removed or damaged, (b) the Hardware has been altered or modified, except by eSIX, (c) the Hardware damage was caused by use with non eSIX Hardware, (d) the Hardware has not been installed, operated, repaired, or maintained in accordance with instructions supplied by eSIX, (e) the Hardware has been subjected to abnormal physical or electrical stress, abuse, misuse, negligence, or accident, (f) the serial number on the Hardware has been altered, defaced, or removed, (g) the Hardware damage was caused by lightning, power surges or wrong voltage usage, or (h) the Hardware is supplied or licensed for beta, evaluation, promotional, testing or demonstration purposes for which eSIX does not charge a purchase price or fee.

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