The Tropos 6420 outdoor mesh router is a cost-effective, easy to deploy, high-performance outdoor networking solution. Lightweight and compact, the Tropos 6420 router delivers superior performance through support for the 802.11n standard, a next-generation high-sensitivity radio design, and new, patented features of the industry-leading Tropos Mesh OS.

**Wireless**
- IEEE 802.11b/g/n radio (Tropos 6410 and 6420)
  - Modulation: 802.11g/n - OFDM (64-QAM, 16-QAM, QPSK, BPSK); 802.11b - DSSS (DBPSK, DQPSK, CCK)
  - Media access protocol: CSMA/CA with ACK
  - TX power (dBm EIRP)
- 2x2 MIMO-antenna system: 2-TX x 2-RX
- 8 dBi integrated omnidirectional antennas
- RX sensitivity:
  -95 dBm @ 6 Mbps

**Interfaces**
- 802.11a/b/g/n wireless, 802.11a, 802.11n client compatibility
- One IEEE 802.3u autosensing 10/100BASE-T Ethernet port
- One 10/100/1000 BASE-T Ethernet port
- Serial: RS-232 or RS-485
- Protocols: DNP3, Modbus (RTU), Modbus (ASCII), raw (serial pass-through) support
- IPv4; IPv6-ready
- BGP
- 802.1q VLAN support (ESSID and IP based tagging)
- Support for static and dynamic addressing for wireless and wired clients
- Session-persistent mobility across subnets
- IP multicast forwarding, IGMPv3; IGMP Proxy
- Automatic rate, power, channel and band control
- IEC 61850 GOOSE messaging
- Reliable broadcast
- System 800xA RNRP

**Quality of service**
- 802.11e WMM
- 802.1p/q with 4 queues per VLAN and ESSID
- 802.1p and DSCP
- VoIP and VoWiFi support
Management
- Local and remote management tools via HTTPS
- Identity-based authentication (4 levels)
- Configuration save and restore
- Software upgrades
- SNMP (standard MIBs)
- Wireless, network and client monitoring and statistics
- Infrared (IR) port
- Wireless rescue

Security
- IPsec VPNs with tunnels to wired client interfaces using AES
- Authentication: WPA, WPA2, 802.11i, RADIUS, 802.1x (includes EAP-TLS, EAP-TTLS, EAP-SIM, PEAP)
- Encryption: open, WEP, TKIP, AES-CCM
- AES encryption of mesh and control traffic
- FIPS 140-2 Level 2 compliant
- Technical controls required to achieve NERC CIP v5 compliance
- Multiple BSSIDs & ESSID (ESSID suppression)
- Integrated firewall
  - Packet filtering on TCP/UDP port, protocol, SA, DA
  - Peer-to-peer blocking
  - Client access control lists
  - Evil twin detection and reporting
  - Denial of service (DoS) attack detection and reporting

Environmental specifications
- Operating temperature range: -40°C to 75°C
- Storage temperature range: -40°C to 85°C
- Weather rating: IP67 UL579/IEC 60529 IP67
- Wind survivability: >165 mph
- Wind loading (165 mph): <210 Newtons
- ASTM B117 salt fog rust resistance compliant
- Shock & vibration: ETSI 300-19-2-4 spec T4.1E class 4M3
- Transportation: ISTA 2A

Power
- 802.3at on the 10/100/1000BASE-T port
- 12-48 VDC on the 100/100BASE-T port
- 120/240 VAC with optional, external accessory (optional external battery backup available)
- Power consumption: 4 W typical
- Power-on and network status LEDs

Physical
- Dimensions (w/o mounting brackets): 8.75" (22.2 cm) x 7.25" (18.4 cm) x 14" (35.6 cm) high with antennas
- Weight: 5 lbs (2.3 kg) max., without mounting brackets

Wireless approvals (Pending)
- FCC CFR 47 Part 15
- Industry Canada RSS 210
- EN 301 489-17
- EN 300 328
- EN 301 893
- EN 302 502

Safety approvals (Pending)
- EN 60950
- IEC 950
- UL 60950-1
- CSA 22.2 No. 60950-1
- UL 579/IEC 60529 IP67 rated for outdoor use
- UL 1449/IEC 60664-1
- CE
- IEEE 1613

Protection
- Antenna protection integrated
- Electrical protection:
  - EN61000-4-4 Level 2 electrical fast transient burst immunity
  - EN61000-4-3 Level 2 EMC field immunity
  - EN61000-4-2 Level 2 (contact), Level 3 (air) ESD immunity

Warranty
- Five (5) year hardware warranty
- Software and hardware maintenance plans available

For more information please contact:

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