agatel
iga connect®

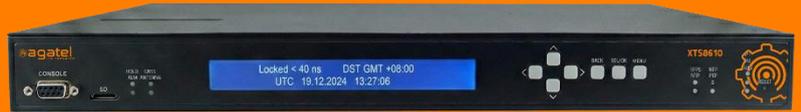# RELIABLE SECURE
CONNECTIVITY

XTS8610 Series
Advanced Sync Pro IEC-61850-3 Industrial NTP/PTP Server
Grandmaster Clock

XTS8610 Series
Advanced Sync Pro IEC-61850-3 Industrial NTP/PTP Server Grandmaster Clock

FEATURE HIGHLIGHTS

- IEC 61850-3 HV & IEEE 1613 Certified NTP Server & IEEE 1588 PTP Grandmaster
- -40 to +85 °C Operating Temperature, IP30 Protection, and Up to 5100 m Altitude
- MIL-STD-810F Certified for Environmental and Transportation Reliability
- Dual Hot Swappable Power Modules with Wide Input Range
- Full Redundancy Across Power, System, Network, and Link Layers
- <40 ns PRTC-B/PTP, <50 µs NTP Accuracy, Calnex Verified
- Excellent Holdover Performance: <0.5 µs/8 Hours / <72 µs/7 Days
- Supports Power, Telecom, AVBTSN and Enterprise Profile
- Four Ethernet Ports: Two PTP-Capable Combo Ports, All Four NTP-Capable
- Dual Media Combo Ports Enable Cost-Effective Copper/Fiber Deployment
- Supports Multi-Constellation GNSS with Anti-Jamming and Anti-Spoofing
- Optional Multi-band GNSS model supporting up to concurrent constellations
- Antenna Fault Detection and Protection: Short Circuit and Disconnection
- Configurable IRIG-B (TTL, AM, RS-485), PPS, and 10 MHz Outputs
- Built in 40X2 LCM for display and configuration
- Streamlined cable Management with Rear-Facing connections
- Standard 5-Year Warranty, Upgradeable to 10 Years.

PRECISION TIMING

Precise time synchronization is essential for the safe and reliable operation of power systems. Network faults can occur at any time, but especially for critical utilities, fault detection and isolation need to be fast and accurate to minimize the risk of damage. Even under normal operation, the stability and control of power systems depend on coordination and synchronization of various devices and systems, such as generators, transformers, and switches.

Precise time synchronization allows for coordinated operation and control of these devices, ensuring grid stability and minimizing the risk of power outages. For renewable energy sources such as solar and wind power, where energy resources are often distributed, time synchronization is particularly important for coordination of multiple sources to maximize their contribution to the grid.

Monitoring and analysis of power grids also require precise time synchronization to accurately correlate data from various sources, such as sensors and meters. With event data in the correct sequence, managers can perform real-time and offline analysis of grid performance and faults.

PRODUCT DESCRIPTION

With an operating temperature range of -40 to +85 °C, and IEC 61850-3 HV and IEEE 1613 offering up to four times the EMC protection compared to rugged industrial-grade standards, the XTS8610 is engineered to operate reliably in environments exposed to electrical noise, temperature extremes, and radiated disturbances—ensuring uninterrupted performance and high system availability. The XTS8610 NTP Server and IEEE 1588 PTP Grandmaster is the world's first solution fully certified to both IEC 61850-3 HV and IEEE 1613 standards, delivering exceptional resilience and precision in demanding applications such as power substations, telecommunications networks, automation systems, and enterprise infrastructure.

Rigorously tested by Calnex Solutions, a leader in network synchronization testing, the XTS8610 series delivers exceptional time precision, ensuring your power applications' synchronization needs are met with the highest standards of accuracy. Featuring proven PRTC-B accuracy within 40 ns, IEEE 1588 PTP accuracy within 40 ns, and NTP accuracy within 50 µs, this Grandmaster guarantees precise time distribution across your network.

Holdover performance is critical to ensure uninterrupted and accurate time synchronization during loss of the primary time source. The XTS8610 series offers exceptional holdover stability, with a drift of less than 0.5 µs over 8 hours, and approximately 72 µs over 7 days, as validated by Calnex Solutions. When entering holdover mode, the system intelligently adjusts protocol attributes according to the active time profile (e.g., Power, Telecom) and proactively issues notifications via alarms and syslog to alert operators.

The Grandmaster supports a wide range of IEEE 1588 PTP profiles, making it suitable for deployment in power, telecom, AVB/TSN, and enterprise networks. For power utilities, it complies with IEEE C37.238-2011, C37.238-2017, and IEC/IEEE 61850-9-3:2016. Telecom synchronization is supported through ITU-T G.8265.1, G.8275.1, and G.8275.2 profiles. IEEE 802.1AS is also supported for time-sensitive networking in industrial and media environments. The Enterprise profile ensures interoperability across standard IT infrastructures. In addition, the Grandmaster supports SyncE for enhanced frequency stability in telecom applications.

XTS8610 offers enhanced robustness and resilience against jamming and spoofing attacks. By receiving signals from multiple constellations for verification, the system can provide spoofing detection and enter holdover mode if necessary. The Grandmaster also features comprehensive antenna vulnerability mitigation, detecting short and disconnected antennas to maintain system integrity. For added protection, a surge protector is available for purchase, safeguarding your equipment from electrical surges and ensuring the reliability of your timing infrastructure.
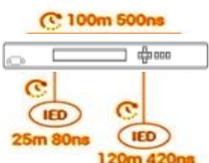
System redundancy is guaranteed by clustering featuring IEC 62439-3 Parallel Redundancy Protocol (PRP) to ensure network redundancy without data loss or downtime. Link redundancy is achieved through bonding and auto-failover functionality of combo ports, delivering resilient connectivity. Additionally, the XTS8610 series offers power redundancy with dual hot-swappable, detectable power modules supporting a wide input voltage range to safeguard against power failures

Modulated IRIG-B is ideal for long-distance transmission due to its resistance to signal degradation and compatibility with legacy equipment. Demodulated IRIG-B, available in TTL or RS-485 formats, offers higher precision, with IRIG-B RS-485 supporting distances up to 1200 meters. PPS and 10MHz outputs are crucial timing signals in modern IEC 61850 power applications, providing precise synchronization essential for various grid operations. The XTS8610 series supports up to two selectable synchronization modules, offering options such as IRIG-B (TTL, AM, Fiber, RS-485), 1-PPS, and 10 MHz waveform input or output, with up to seven configurable channels. Additionally, IRIG-B RS-485 can be extended over long distances using serial-to-fiber converter via fiber-optic cable
.

Compensation for antenna delay is essential because long antenna cables can introduce timing errors that affect the accuracy of synchronized operations. Similarly, output delay compensation for signals such as IRIG-B and PPS is vital, especially in systems with multiple IEDs connected. It is much easier and more efficient to compensate for cable delays at the Grandmaster level rather than at each individual IED, as not all IEDs support delay compensation. Handling these adjustments centrally at the Grandmaster guarantees that all connected devices operate in perfect sync, optimizing the performance and coordination of critical substation operations.

APPLICATION CASE

Two XTS8610 units in the station layer determine the Active and Backup GMC through BMCA. The Active GMC synchronizes to both GPS and GNSS satellite systems and transmits via IEC 62439-3 PRP to two power domains composed of PRP and HSR networks. According to IEC 61850-9-3 and IEEE C37.238-2017, the total end-to-end budget is 1us, with GMC being 250ns. The XTS8610 achieves superior accuracy of <40ns, reserving more budget for other devices. For early MU devices that rely on 1PPS or IRIG-B for synchronization, the XTS8610 offers 1PPS, IRIG-TTL, IRIG-B AM, IRIG-B RS-485, and RS-485 to fiber-optics for long-distance transmission and delay compensation.

The HSR network provides zero-packet-loss redundancy but also increases latency. Devices in the process layer require more precise timing. When the end-to-end budget cannot be met, a GMC must be deployed to aid in accurate timing for critical devices. The XTS8610, certified to IEC61850-3 HV & IEEE 1613, operates reliably in harsh process layer environments, providing precise synchronization.

In addition to the XTS8610, our timing solution for power substations also includes BC or TC of XRG9528, P-Delay TC of XEG9512, HSR Redbox, and Quadbox of XER700X.

PRODUCT SPECIFICATIONS

Technical Specifications	
Model Name	XTS8610 Series
GNSS Receiver Specifications	
GNSS Input ports	1x GNSS Input; TNC (F) - active Antenna
GNSS Module specific Information	Multi-Constellation Supported: GPS L1, GLONASS L1, BeiDou B1, Galileo E1 Maximum Concurrent Constellations: 3 Leap Second: Supported Sensitivity for GPS: • Tracking: -166 dBm • Reacquisition: -160 dBm • Cold Start: -148 dBm • Hot Start: -160 dBm
Acquisition Times	Cold Start: < 45 seconds Warm Start: < 7 seconds
Antenna Requirements	3.3 V, < 50 mA Minimum gain=5dB; Maximum gain + Cable Attenuation ≤ 40dB
GNSS Vulnerability Mitigation	**Jamming**: Support Detection, Warning and Switch to OCXO Holdover **Spoofing**: Support Detection, Warning and Switch to OCXO Holdover (GNSS Antenna Only)
Antenna Vulnerability Mitigation	**Antenna Cable Short**: Support Detection, Warning and Switch to OCXO Holdover **Antenna Disconnection**: Support Detection, Warning and Switch to OCXO Holdover
Multiple Band - GNSS Receiver Specifications	
GNSS Input ports	1x GNSS Input; TNC (F) - active Antenna
GNSS Module specific Information	Multi-Constellation Supported: GPS: L1C/A, L2C or L5 Galileo: E1, E5a or E5b BeiDou: B1I, B2I or B2a GLONASS: L1OF NavIC: L5 Maximum Concurrent Constellation: 4 Leap Second: Supported Sensitivity for GPS + GLONASS + Galieo + BeiDou • Tracking: -167 dBm • Reacquisition: -160 dBm • Cold Start: -148 dBm • Hot Start: -157 dBm
Acquisition Times	Cold Start: < 24 seconds Warm Start: < 2 seconds
Antenna Requirements	3.3 V, < 50 mA Minimum gain=6dB; Maximum gain + Cable Attenuation ≤ 30dB
GNSS Vulnerability Mitigation	**Jamming**: Support Detection, Warning and Switch to OCXO Holdover **Spoofing**: Support Detection, Warning and Switch to OCXO Holdover (GNSS Antenna Only)
Antenna Vulnerability Mitigation	**Antenna Cable Short**: Support Detection, Warning and Switch to OCXO Holdover **Antenna Disconnection**: Support Detection, Warning and Switch to OCXO Holdover

Antenna Specification (Accessories)

GNSS Antenna	GNSS receiver: GPS L1, GLONASS L1, BeiDou B1, Galileo E1 LNA Gain: 40dB min Weather-Proof Housing: IP69K Operating and Storage Temperature: -40°C ~85°C ESD: ±15KV Air Discharge Mechanical size: 66.5 mm dia. x 21 mm H MIL-STD-810F Supply Voltage Range: 2.5 to 16VDC
GPS Antenna	GNSS receiver: GPS L1, Galileo Weather-Proof Housing: IP69K Operating and Storage Temperature: -40°C ~85°C ESD: ±15KV Air Discharge Mechanical size: 66.5 mm dia. x 21 mm H MIL-STD-810F Supply Voltage Range: 2.5 to 16VDC
Anti Jamming GNSS Antenna	GNSS receiver: GPS L1, GLONASS L1, BeiDou B1, Galileo E1 LNA Gain: 40dB Typ. Weather-Proof Housing: IP69K Operating and Storage Temperature: -40°C ~85°C ESD: ±15KV Air Discharge Mechanical size: 66.5 mm dia. x 21 mm H MIL-STD-810F Supply Voltage Range: 2.5 to 16VDC
Multi-Band GNSS Antenna (XTS8610)	GNSS Receiver: GPS: L1C/A, L2C or L5 Galileo: E1, E5a or E5b BeiDou: B1I, B2I or B2a GLONASS: L1OF NavIC: L5 LNA Gain: 37dB min Weather-Proof Housing: IP69K Operating and Storage Temperature: -40° C - 85° C ESD: ±15KV Air Discharge Mechanical Size: 66.5 mm dia. x 21 mm H MIL-STD-810F Supply Voltage Range: 2.5 to 16VDC
Max. Antenna Cable Length	Antenna cable: Without amplifier: LMR-400: 150M CFD-200: 50M RG58A/U: 25M With Amplifier: LMR-400: 250M CFD-200: 80M RG58A/U: 50M
Max. Sync-out Cable Length	RG58 A/U Sync-Out cable: 1PPS, 10MHz, IRIG-B TTL: 150M IRIG-B AM: 150M @1K impedance, 300M @10K impedance IRIG-B RS485: 1200M

Proven Clock Accuracy (Relative to UTC)

1PPS	±40 ns Peak *1
Demodulated IRIG-B	±40 ns Peak *1
Modulated IRIG-B AM	±1 μs Peak *1
RS-485 IRIG-B	±100 ns Peak *1
PTP Timestamp	±40 ns Peak *1
NTP Timestamp	±50 us Peak , ±40 us Average *1
Holdover accuracy - OCXO	< 0.5 us / 8 hours / < 72 us / 7 days *2
	*1. Device locked to satellites for at least 24 hours.
	*2. Device locked to satellites for at least 48 hours before holdover

Network Interface

Ethernet Standards	IEEE 802.3 10BaseT IEEE 802.3u 100BaseT(X) IEEE 802.3ab for 1000BaseT(X) IEEE 802.3u for 100Base-FX IEEE 802.3z for 1000Base-X
Gigabit Ethernet Ports	Two Combo ports, 2x 10/100/1000BASE-T(X) RJ45 or 2x 100/1000 Base-X SFP Support Synchronous Ethernet (SyncE) per ITU-T G.8261 ITU-T, G.8262 and G.8264 ESMC), PTP-Capable and NTP-Capable
Fast Ethernet Ports	2x 10/100 BASE-T(X) RJ45, NTP-Capable

LCD Display & Control Buttons

LCD Spec	Character Display LCD 40x2 5x8 Dots Includes Cursor LCD Operating Temperature Range: -20° C to 70° C LCD Over-Temperature Protection
Control Buttons	Up, Down, Left, Right, Menu, Enter, Back

I/O

Console	1x DB9 Serial Console Port
SD Slot	1x micro-SD slot
Relay-Alarm Contact	Three Pins Relay with NC, NO and GND. Rated Operational Voltage: 24-250 VDC Continuous carrier: 3 A max. 75VA max Dropout Time: ≦ 6 ms typical Pickup time: ≦ 8 ms

Sync Module S2

Sync1 ~ Sync2	Two configurable output channels (coaxial BNC (F) connector): 1. 1PPS/PPM/PPH Output (Square Wave, configurable pulse width) 2. IRIG-B TTL Output (Support IEEE 1344 and C37.118.1) 3. AFNOR French Time Code Output 4. ASCII Timestamp Output*
Sync3 ~ Sync5	Three configurable output channels (Sync 3 - Sync 5, coaxial BNC (F) connector): 1. 1PPS/PPM/PPH Output (Square Wave, configurable pulse width 2. IRIG-B TTL B000~B007 Output (Support IEEE 1344 and C37.118.1) 3. IRIG-B AM B120~B127 Output (Support IEEE 1344 and C37.118.1) 4. AFNOR French Time Code 5. ASCII Timestamp Output*
Sync6	One configurable output channel (Sync 6, TB3 connector): 1. IRIG-B RS-485 B000~B007 Output (Support IEEE 1344 and C37.118.1) 2. AFNOR French Time Code Output

Sync Module S3

Sync1 ~ Sync2	Two configurable output channels (coaxial BNC (F) connector): 1. 1PPS/PPM/PPH Output (Square Wave, configurable pulse width) 2. IRIG-B TTL Output (Support IEEE 1344 and C37.118.1) 3. AFNOR French Time Code Output 4. ASCII Timestamp Output*
Sync3	One configurable output channel (Sync 3, coaxial BNC (F) connector): 1. 1PPS/PPM/PPH Output (Square Wave, configurable pulse width) 2. IRIG-B TTL B000~B007 Output (Support IEEE 1344 and C37.118.1) 3. IRIG-B AM B120~B127 Output (Support IEEE 1344 and C37.118.1) 4. AFNOR French Time Code 5. ASCII Timestamp Output*
Sync4	One configurable input channel (coaxial BNC (F) connector): 1. IRIG-B TTL B000~B007 Input (Support IEEE 1344 and C37.118.1) 2. 1PPS input 3. AFNOR French Time Code TTL Input
Sync5	One configurable modulated input channel (coaxial BNC (F) connector): 1. IRIG-B AM B120~B127 Input (Support IEEE 1344 and C37.118.1) 2. Modulated AFNOR French Time Code Input
Sync6	One configurable input/output channel (Sync 6, TB3 connector): 1. IRIG-B RS-485 B000~B007 Input (Support IEEE 1344 and C37.118.1) 2. IRIG-B RS-485 B000~B007 Output (Support IEEE 1344 and C37.118.1) 3. AFNOR French Time Code RS-485 Input 4. AFNOR French Time Code RS-485 Output
Sync7	One configurable output channel (ST (F) connector): 1. 1PPS/PPM/PPH Output (Square Wave, configurable pulse width) 2. IRIG-B TTL Output (Support IEEE 1344 and C37.118.1) 3. AFNOR French Time Code Output 4. ASCII Timestamp Output*

Electrical Output Drive Levels

1PPS/IRIG-B TTL Output	5VDC 125 mA TTL compliant
Modulated IRIG-B Output	5Vp-p, 3.3:1 ratio, AM, Sinewave
1PPS/IRIG-B TTL Input	5VDC HCMOS, > 2.0V High <0.8V Low
Modulated IRIG-B Input	1Vp-p to 8 Vp-p, ratio 3.3:1, AM
IRIG-B Fiber TTL	820nm, Different fiber size: 50/125um, 62.5/125um, Output Driver Typ. 13.1uW
IRIG-B RS485 Input/Output	±5 VDC IRIG-B Half-Duplex; 32 Transceivers Max. a bus

Frequency

Oscillator	Advanced managed OCXO, with temperature drifting compensation

IEEE1588 Profiles

Default	IEEE 1588V2 (PTPv2) Default UDP (IEEE1588-2008 Annex D and J) Default 802.3 (IEEE1588-2008 Annex F and J)
Power	IEC/IEEE61850-9-3-2016 Power Utility Profile IEEE C37.238-2011 Power Profile, with VLAN support IEEE C37.238-2017 Power Profile, with VLAN support
Telecom	ITUT-G.8265.1 Frequency ITUT-G.8275.1 Phase/Time ITUT-G.8275.2 Phase/Time

AVBTSN	802.1AS Profile
Enterprise	Enterprise profile
*Media Broadcast (In Development Plan)	SMPTE ST 2059-2 AES67 Media Profile

System Moods

GNSS Locked Mood	Synchronizes time with GNSS signals for high accuracy
Handover Mood	Maintains time using the OCXO clock after GNSS is unavailable
Free Run Mood	Operates independently using RTC as the time source along with the OCXO clock

Functions

Network Synchronization	RFC 1119 (NTPv2) Server RFC 1305 (NTPv3) Server RFC 5905 (NTPv4) Server RFC 1769 (SNTPv3) Server RFC 2030 (SNTPv4) Server
Network Protocols	VLAN (IEEE 802.1q) filtering/tagging IEEE 802.1p QoS DSCP IPv4, IPv6 TCP, UDP DHCP Client TACAS+/ RADIUS
Redundancy	Devices Clustering (NTP Only) PRP (IEC 62439-3) Bonding – Active & Backup Bonding -- LACP Combo Ports
Management	HTTP, HTTPS SNMP v1/v2,v3 SSH/ Telnet (CLI), could be enabled/disabled Console CLI Estimated Time Accuracy GNSS Status Power Status PTP & NTP Status SD/MMC Backup & Restore
Events & Alarms	Event Log Syslog Relay & Alarm Management SNMP Trap

Physical Characteristics

Housing **Dimension (W x H x D)**	SPCC w/Zinc Plated Body + Aluminum cover IP40 Metal Housing 440 x 300 x 44 Chassis made of 1 mm SECC Sheet
Weight	3.9KG Max
Installation	1U Rack-mount

Power Supply Module

DC Module	Rated Supply Voltage: ±24 - ±60 VDC Input Voltage Range: ±20 - ±66 VDC
AC Module	Rated Supply Voltage: 110 - 240 VAC, 50/60 HZ 110 - 250 VDC Input Voltage Range: 85 - 264 VAC, 50/60 HZ 88 - 300 VDC
Power Consumption	Approximately 15 W (Typical) Approximately 20 W (Max)

Environmental Limits

Operating Temperature	-40°C to +85°C (-40°F to 185°F)
Storage Temperature	-40°C to +85°C (-40°F to 185°F)
Operating Altitude	5100m
Ambient Relative Humidity	5% to 95% (Non-condensing)

Regulatory Approvals

Safety	LVD EN 62368-1 (Certified Operating Temperature: 75°C), IEC 60255-5
EMC	FCC(EMI): FCC Part 15, Subpart B, Class A CE(EMI): EN 55032, EN 61000-6-4, Class A EN 61000-3-2 (Current Harmonics) EN 61000-3-3 (Voltage Flicker) CE(EMS): EN 55035, EN 61000-6-2 CE(GNSS): EN 303 413. EN 301 489-19 IEC 60255-25, IEC 60255-22-1
Power Automation	IEC61850-3, IEEE 1613

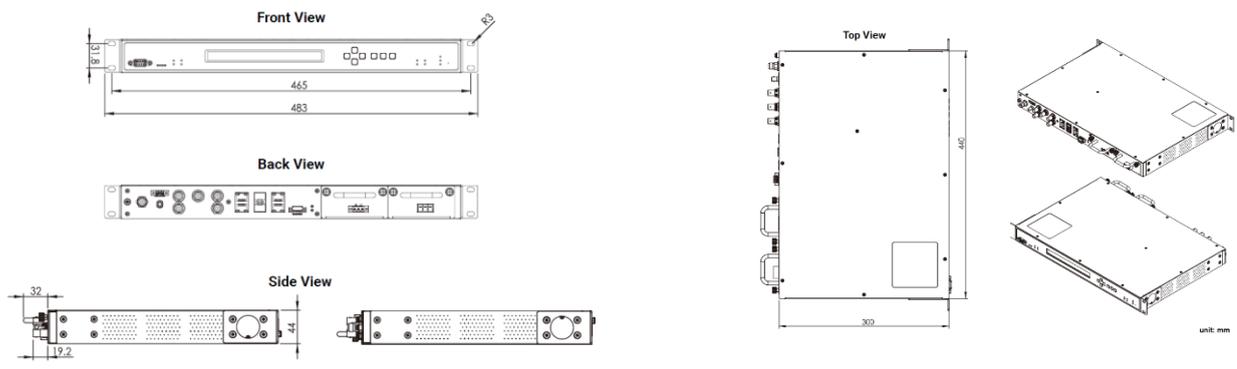| Test	Item		Value	Level
IEC 61000-4-2	ESD	Contact Discharge Air Discharge	±8KV ±15KV	4 4
IEC 61000-4-3	RS	Enclosure Port	10(V/m), 80-3000MHz 20(V/m), 80-1000MHz	3
IEC 61000-4-4	EFT	AC Power Port DC Power Port Signal Port	±4.0KV ±4.0KV ±2.0KV	4 4 Special
IEC 61000-4-5	Surge	AC Power Port AC Power Port DC Power Port DC Power Port Signal Port	Line-to Line±2.0kV Line-to Earth±4.0kV Line-to Line±1.0kV Line-to Earth±2.0kV Line-to Earth±4.0kV	4 4 4 3 4
IEC 61000-4-6	CS	0.15-80MHz	10V rms 0.15-80MHz, 80% AM	3
IEC 61000-4-8	PFMF	(Enclosure)	100A/m continuous, 1000A/m (3s)	5
IEC 61000-4-11	DIP	AC Power Port	30% reduction (Voltage Dips), 1 period 60% reduction (Voltage Dips), 50 period 100%, reduction (Voltage interruptions), 5 period 100% reduction (Voltage interruptions), 50 period	-
IEC 61000-4-16	Main Frequency Voltage	DC Input Port Signal Port	30V Continuous, 300V 1s 30V Continuous, 300V 1s	4 4
IEC 61000-4-17	Ripple	DC Input Port	10% of unit	3
IEC 61000-4-18	Damped Oscillatory	AC Power Port	2.5KV common, 1KV differential mode @ 1MHz	3
		Signal Port Telecommunication Port	2.5KV common, 1KV differential mode @ 1MHz	3

| IEC 61000-4-29	DC Voltage Dips & Interruptions	DC Input Port	30% Reduction (Voltage Dips):0.1 sec 60% Reduction (Voltage Dips):0.1 sec 100% Reduction(Voltage Interruption):0.05 sec
IEC 60255-22-1	1 MHz burst immunity	AC Power Port AC Power Port DC Power Port DC Power Port Signal Port	Line-to Line±1.0 kV Line-to Earth±2.5 kV Line-to Line±1.0 kV Line-to Earth±2.5 kV Line-to Earth±1.0 kV
Shock Drop Vibration	MIL-STD-810G Method 516.5 MIL-STD-810F Method 516.5 MIL-STD-810F Method 514.5 C-1 & C-2		
RoHS2	Yes		
MTBF	20 years		
Warranty	5 years / Upgradable to 10 years		

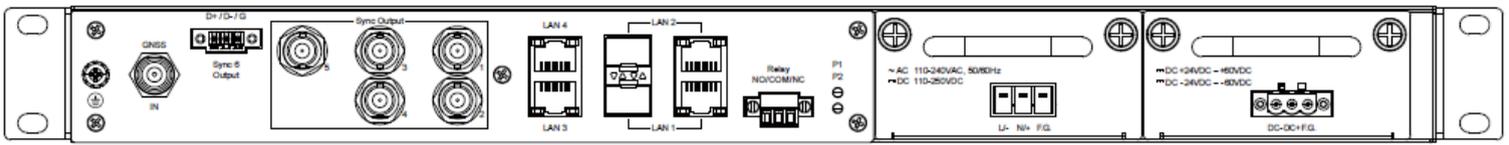# DIMENSIONS & ACCESSORIES

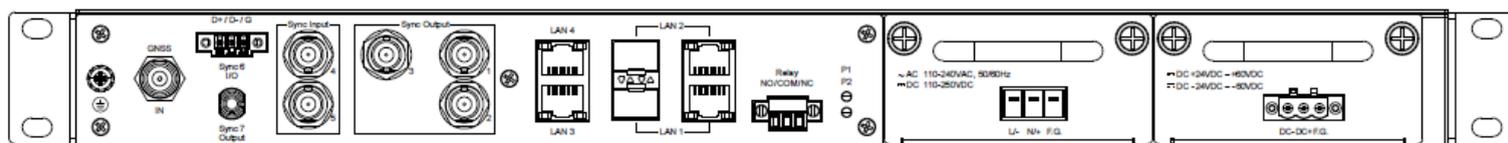# PRODUCT CONNECTIONS

Front View XTS8610 (All Models)
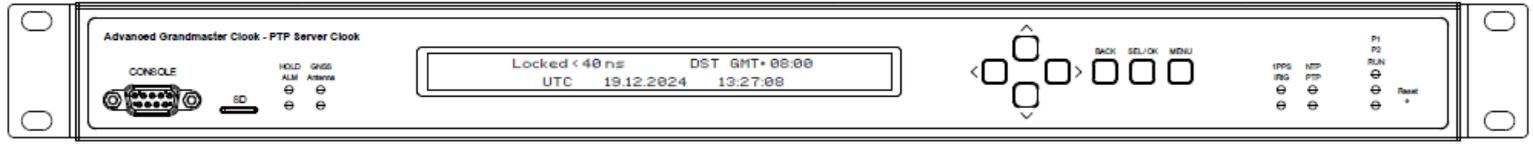
Back View XTS8610, XTS8610M
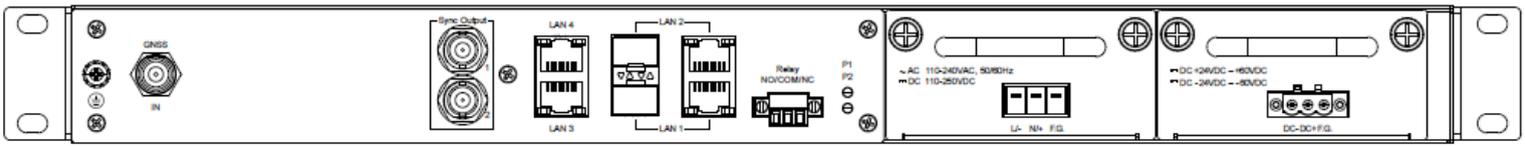
Back View XTS8610-S2, XTS8610M-S2

Back View XTS8610-S3, XTS8610M-S3

ORDER INFORMATION

Model	Technology	Ethernet	G.Ethernet/SFP	GNSS Module	Sync Module	Power Modules
XTS8610	GPS	2	2	Single Band	N/A	Support Two Hot Swappable Power Modules. 2x NTS8610-AC or 2x NTS8610-DC or 1x NTS8610-DC + 1x NTS8610-AC
XTS8610M	GPS	2	2	Multi-Bands	N/A	
XTS8610-S2	GPS	2	2	Single Band	S2	
XTS8610M-S2	GPS	2	2	Multi-Bands	S2	
XTS8610-S3	GPS	2	2	Single Band	S3	
XTS8610M-S3	GPS	2	2	Multi-Bands	S3	

Power Modules	
XTS8610-DC	Rated Supply Voltage: ±24 – ±60 VDC Input Voltage Range: ±20 – ±66 VDC
XTS8610-AC	Rated Supply Voltage: 110 – 240 VAC, 50/60 Hz 110 – 250 VDC Input Voltage Range: 85 – 264 VAC, 50/60 Hz 88 – 300 VDC

WHO WE ARE

Built on 20 years of experience in designing and manufacturing industrial networking products, **Agatel** was established from the UK to serve the infrastructure and industrial sectors in EMEA markets with reliable connectivity for mission-critical systems in demanding environments.

Experienced in hardware and software design and integration, we produce high-quality yet cost-effective industrial networking and communication products with great customization capabilities and robust implementations, equipping our customers for reliable secure industrial networks.

WHAT WE OFFER

The needs of our customers' industry are different from those of corporate IT environments – industrial operating environments are tough and the impact of failure in the field can lead to business threatening situations, hence our products will have lifetimes in excess of 20 years.

From entry-level to high-performance industry-certified hardware, **Agatel** offers a full solution spectrum to suit our customers' budgets and application requirements, with features such as industrial-grade reliability, integrated security, network redundancy, and advanced performance.

Our product solution profile includes industrial Ethernet switches, network time servers, media converters, industrial wireless devices, and serial device servers, covering a wide array of mission-critical applications such as automation, security, transport, water, oil and gas, and power grids.

WHY CHOOSE US

We help our customers reduce downtime and operational costs of their industrial applications in harsh environments. Leading system integrators in EMEA rely on our niche technical expertise and product quality to increase their applications' robustness, revenues, and competitive differentiation.

Agatel ruggedized high-quality solutions are designed to deliver zero-network-downtime for harsh project demands, allowing for reliable connectivity to keep people and assets safe and secure in harsh and hazardous environments, and allowing customers to focus on growing their business.

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