

PRESSENTATION

Compact and modular, the Netsilon time server combines the accuracy of a master clock with the secure approach of data networks:

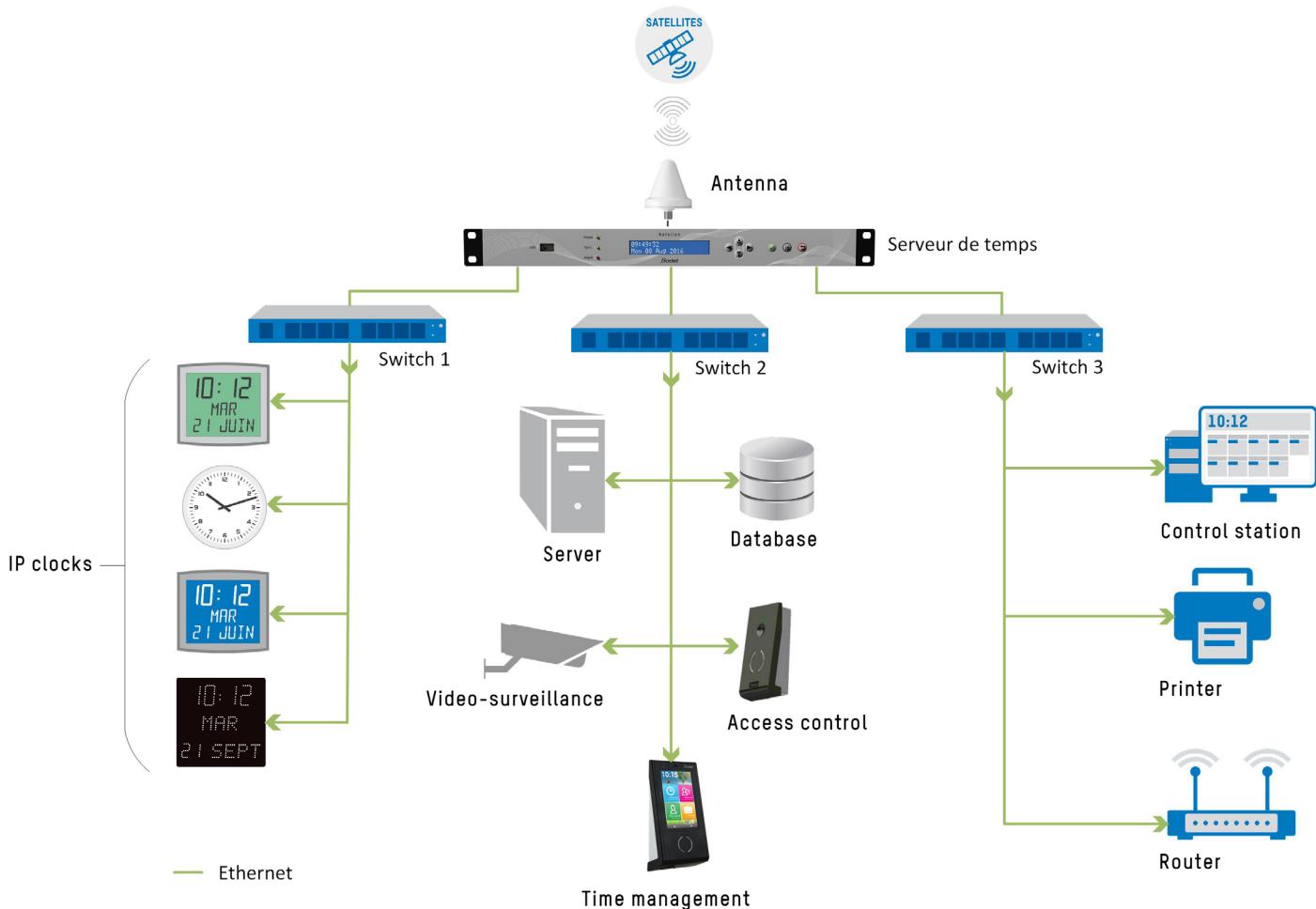
- High-precision internal clock regulated by its TCXO quartz.
- Priority order for the different synchronisation references (input).
- Modular design allowing a wide variety of input/output signals (up to 4 expansion cards).
- Network security management: Enable/disable encryption, authentication, and access protocols.
- Alarm information available as SNMP traps and email.



APPLICABLE STANDARDS

- EN 62368-1
- EN 55032
- EN 55024

EXAMPLE OF INSTALLATION

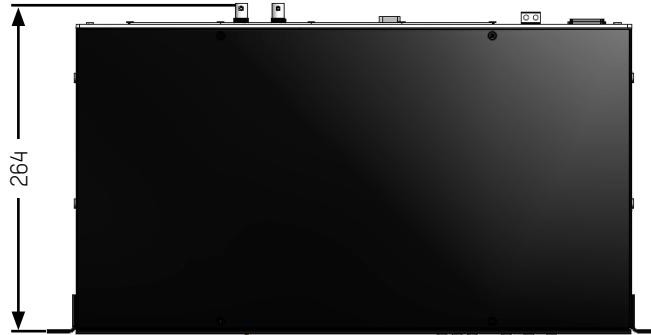
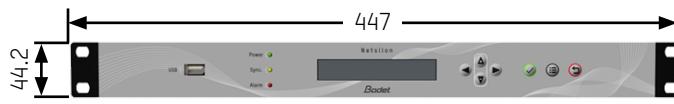


MODELS**QUARTZ TCXO TYPICAL VALUES**

Accuracy (average after 24 hours with GPS signal)	1x10 ⁻⁹
Stability (average after 2 weeks with GPS signal)	1x10 ⁻⁷ /day
Input	1x GPS
Outputs	1x Ethernet, 4 slots for expansion cards
Holdover (after 2-week GPS synchronisation at constant temperature)	5 ms (after 24 hours)
Alarm	SNMP traps, email and relay contact

MECHANICAL CHARACTERISTICS

Construction	Metal case – 1 U rack – 19"
Operating temperature	From 0 °C to +50 °C
Humidity rating	0-90 % without condensation
Protection rating	IP41
Weight	2.5kg
Dimensions	447 x 264 x 44.2 mm

**ELECTRICAL CHARACTERISTICS**

Power supply	18-36 VDC or 100-240VAC 50/60 Hz (1.4 A @ 115VAC, 0.85 A @ 230 VAC), without ventilation
MTBF	100,000 hours

COMMUNICATIONS

Network port	RJ45, 1000BASE-T (Gigabit)
Front panel	USB socket (Enable/Disable) for saving and updating software Keyboard (lockable) and LCD screen for network configuration

NETWORK CHARACTERISTICS

PROTOCOLS

NTP V2, V3, V4	Conforms with or exceeds RFC 1305 and 5905. Supports Unicast, broadcast, Multicast, MD5 encryption and Autokey.
Client/server mode:	
NTP requests per second	> 2000
SNTP V3, V4	Conforms with or exceeds RFC 1769, 2030, 4330 and 5905.

MANAGEMENT

HTTP/HTTPS	Browser-based configuration and supervision
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COMMUNICATIONS

IP	Version 4
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SERVICES

DHCP	Version 4
SMTP	Mail forwarding

SUPERVISION

SNMP	Supports v1, v2c and v3 (traps + agents)
Relay contact/External input	Sending and reception of alarms

SECURITY FEATURES

- Enable/disable protocols
- Protection by single authentication (login + password)
- DES and AES encryption
- SHA-1, MD5 authentication
- SSL encryption

REFERENCES

• 907900	NETSILON 7 (100-240 VAC)
• 907901	NETSILON 7 (18-36 VDC)
• 907902	NETSILON 7 (100-240 VAC + 18-36 VDC)

EXPANSION CARDS

• 907920	Netsilon 2-port Ethernet Card
• 907940	Netsilon 2-port AFNOR Card
• 907942	Netsilon 1-output Pulse Card
• 907944	Netsilon 1 input + 1 output Current Loop Card

ACCESSORIES

• 907037	Bodet GPS synchronisation antenna
• 907241	DHF secondary transmitter
• 907511	DHF main transmitter

EXPANSION CARDS

CURRENT LOOP CARD

Quantity 1x output
Signal type Analogue
Connector Terminal
Max. no. of cards 1

AFNOR CARD

Quantity 2x outputs (independent)
Signal type Amplitude modulation
Connector Terminal
Max. no. of cards 4

ETHERNET CARD

Quantity 2x ports
Connector RJ45 - 1000BASE-T
Max. no. of cards 5 ports max. [1 on the main + 2 by card]
Max. no. of cards 2

PULSE CARD

Quantity 1x output
Signal type 24 VDC (Min or 1/2 Min //)
Connector Terminal
Max. no. of cards 4