8029NTS/GPS

Network timeserver for DIN rail mounting

Technical data.

General Data	
Housing:	for 35mm DIN Rail mounting according to DIN EN 60715 TH35
Protection class:	IP30
Weight:	approx. 0.8 kg
Dimensions:	Standard dimensions: W100mm x H105mm x D130mm Please note: If you choose to equip your system with 1 additional independent NTP time server / with additional signal output modules, the application will be delivered with an extended mounting rail: W135mm x H105mm x D130mm
MTBF:	> 250,000h

Power Supply	
Input Voltage:	100-240V AC, 47-440Hz 110-250V DC
Optional:	24V DC (18-36V DC) 48V DC (36-76V DC)

Ambient Conditions		
Temperature:	Operation:	0°C to +50°C
	Storage:	-20°C to +75°C
Humidity:		max. 95%, non condensing

GPS synchronization input	
Receiver type:	22-channel receiver, C/A-code
Evaluation:	L1 frequency (1,575.42MHz)

Accuracy	
Internal PPS pulse:	< ± 100ns
VCO Regulation:	± 0.1ppm, after 30min. GPS reception
Drift for T = +20° (const.):	after 1h: 0.36msec
Freewheel accuracy:	after 24 h: 8.64msec

CE Conformity
Electromagnetic Compatibility Directive – 2014/30/EU (formerly 2004/108/EC)
EN 55022:2010 / AC:2011
EN 61000-3-2:2006 / A2:2009, EN 61000-3-3:2013
EN 55024:2010
Low Voltage Directive – 2014/35/EU (formerly 2006/95/EC)
EN 60950-1:2006 / AC:2011
RoHS Directive – 2011/65/EU
Directive of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment

Interfaces

- 1x Ethernet 10/100 Mbit/s autosensing via RJ45
- 1x USB-Port for update and recovery function
- 1x optical coupler for synchronization status output
- **Optional:** additional signal output modules
  - * 1 x additional independent NTP timeserver can be integrated
  - * IRIG-B (analogue / digital)
  - * DCF77 pulse
  - * Cyclic Pulses

Time Protocols

- NTPv4 Server
- NTP Broadcast
- NTP Multimode
- NTP Client for further NTP Server (redundancy)
- SNTP Server
- SINEC H1 time datagram – **optional**
- RFC-867 DAYTIME Server
- RFC-868 TIME Server

RFC Listing of Supported Protocols

- NTPv4 - Protocol and Algorithms Specification (RFC 5905)
- NTPv4 - Autokey Specification (RFC 5906)
- PPS API (RFC 2783)
- DHCP (RFC 2131)
- Time Protocol (RFC 868)
- Daytime Protocol (RFC 867)
- HTTP (RFC 2616)
- HTTPS (RFC 2818)
- SSH-2 (RFC 4250-4256, 4335, 4344, 4345, 4419, 4432, 4716, 5656)
- TELNET (RFC 854)
- SNMP (RFC 1213, RFC1901-1908) – **optional**
- SYSLOG (RFC 5424) – **optional**
- SMTP (RFC 5321) – **optional**

Customized system modifications are available upon request!