TRANSLATES PTP TO
OTHER TIME CODES

PTP TRANSLATOR

The PTP Translator is a compact DIN-rail mount device that translates PTP (default, power and telecommunications profiles) to legacy time codes such as IRIG-B.

The PTP Translator enables you to migrate to PTP without having to incur the expense of replacing all your equipment that don't support PTP.

KEY FEATURES

- Compact DIN-rail mounting form factor
- Allows IED's equipped with IRIG-B, Pulse or other common time code inputs to conveniently access a PTP network
- Input: default, telecommunications or power profiles
- Output: HV MOSFET, AM IRIG-B, RS232/422, TTL programmable and ST Fiber
- Intuitive Configuration Software
- Enhanced Security and encryption that exceed NERC CIP requirements

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PHYSICAL

- UL94-V0 polycarbonate flame retardant DIN-rail mount case with IP40 (Ingress Protection rating).
- (W) 72 mm x (D) 60 mm x (H) 90 mm, 0.2 Kg Rising clamp terminals: Wire size (max): 1.5 mm Ø

LED INDICATORS

PTP Status / availability
Power
Ethernet ACT and LNK LEDs

ENVIRONMENTAL AND ELECTRICAL

Power supply:	L = 14-36 Vdc
	M = 20-75 Vdc
	H = 90-300 Vdc
Power Drain:	5 W max
Operating temperature:	-10 to +65°C
Humidity:	To 95% non-condensing

Isolation
Power to I/O:	1.6 kV
Between TTL outputs	
A + B:	2.5 kV

STANDARD OUTPUTS

TTL
1 x TTL programmable independent output, 2-pin, 0-5 V, 150 mA, self resetting fuse

Fiber
1 x IRIG-B Fiber TX (62.5/ 125 μm, λ 820 nm), compatible with multi-mode fiber (ST Fiber connectors)

Alarm
1 x Sync relay (2 pin - Form A contact)
Contact rating: 300 V, 150 mA DC or 265 V, 100 mA AC

OPTIONAL OUTPUTS

In addition to the standard output, one of the following output options are also available for the PTP Translator

TTL
1 x TTL programmable independent output, 2-pin, 0-5 V, 150 mA, self resetting fuse

or

AM IRIG-B
1 x AM IRIG-B output, 2-pin, 8 Vpp, 120 ohm

or

Serial Strings
1 x RS232, 2-Pin +/- 9 V, 15 mA.
Serial time messages can be configured to be output at 1200, 2400, 4800, 9600, 19200 and 38400 baud.
Timing accuracy of RS232 port:
Serial Message   <1 bit time

or

HV MOSFET
1 x HV MOSFET output, 2-pin, 300 V, 1A ('+' = Drain, '-' = Source)

ACCURACY AT PORT

Fixed Outputs	
TTL	± 100 ns
Fiber	± 100 ns

OPTIONAL OUTPUTS	
TTL	± 100 ns
AM IRIG-B	± 2 μs
RS232	< 200 μs
HV MOSFET	± 60 μs

ETHERNET CONNECTION

1 x RJ45 10/100 Ethernet UTP connectors

or

1 x ST multi-mode 100 Fx fiber Ethernet available
Timing accuracy: <100 ns

Protocols Supported

General
DHCP auto-configuration with fallback to ARP tested
link-local address
VLAN packet tagging

SNMP
v1, v2c & v3 support can be independently enabled
Configurable v1, v2c community names &
security groups
Fully configurable via SNMP
v3 User-based Security Module (USM) support USM
authentication methods: MD5, SHA
USM privacy methods: DES, AES
USM MIB support

Notifications
SNMP trap generation v1, v2c & v3
SNMPv3 traps can be authenticated & privatised via
USM
Syslog (RFC-3164 & 5424 verities)

IEEE 1588 v2 (PTP v2) Support
PTP (IEEE1588) v2 slave operation
Slave only profile selection:
- Default
- Power
- Telecommunications
Operating mode supports 1-step / 2 step tx/rx Layer
2 or Layer 3 mapping
Peer to Peer and End to End delay support

Front view

CONFIGURATION SOFTWARE

Windows based configuration software is available to
be downloaded from the Tekron website.

User adjustable features include:
- Multi-level access control
- Privacy & authentication methods equivalent to
  SNMP USM
- "Supervisor-mode" prevents non-approved changes
- Test mode
- Commissioning tool

ABOUT TEKRON

Tekron is a leading developer of accurate GPS/GLONASS clocks and time synchronisation solutions for use in industrial applications.

WORLD WIDE WARRANTY
10 YEARS

CONTACT US

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Note:
The quickest and most effective method to request a quote is through the online quote request form on the Tekron website.

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because timing is everything