

The **NTP100-TC** is an NTP time server that synchronizes to a timecode source and converts the signal to Network Time Protocol. It automatically detects the incoming timecode source; long-term accuracy is the same as the external source. With loss of timecode, the device will revert to an internal oscillator with accuracy of better than 165 ms/day.



## Standard Features

- Compact NTP client / server
- Internal precision TCXO accuracy of  $\pm 1$  min/year
- Optional OCXO accurate of  $\pm 250$  ms/year
- NTP output accuracy of  $\pm 2$  ms
- 6-digit clock display (red)
- Adjustable time display brightness
- Synchronizes to standard timecode signals

## Specifications

### TIME CODE INPUTS

- IRIG-B0 (DCLS), IRIG-B1 (AM), IRIG-A0 (DCLS), IRIG-A1 (AM), IRIG-E0 (DCLS), IRIG-E1 (AM), SMPTE 12M, 309M, 24/25/30 fps, 29.97 drop frame, NASA36 (DCLS), NASA36 (AM)

### HOLDOVER ACCURACY

- Internal precision temperature-compensated crystal oscillator (TCXO) provides accuracy of  $\pm 1$  min/year or  $< 165$  ms/day
- High-stability option with OCXO provides typical stability of 1 ppb/day ( $\pm 250$  ms/year) after 30 days of aging

### NETWORK COMPATIBILITY

- Supports NTP, DHCPv4, DHCPv6 for automatic acquisition of network address, name servers, and timeserver configuration
- SSH communication
- IPv4/IPv6 compatible
- SNMP with custom MIB

### CONFIGURATION

- Configure devices through provided WinDiscovery or SSH
- Configuration is saved to non-volatile memory and survives power losses
- Authenticated network messages prevent unauthorized tampering of clock configuration

### CONNECTORS

- RJ45 - 10/100Mb Ethernet
- DC input - 2.1 mm male jack
- RS-232 9-pin male
- BNC Unbalanced Timecode (Input)
- 3-Pin Balanced Timecode (Input)
- USB for configuration

### POWER

- DC input (9-28 VDC)
- Power consumption:  $< 7.5$  W
- Includes external 24 VDC wall-mount power supply with locking DC plug (UL and CE listed)

### OPERATING PARAMETERS

- Temperature:  $0^{\circ}$  to  $60^{\circ}$ C
- Humidity: Up to 90% (non-condensing)
- MTBF: 625,979 hours  
Calculated using Fixed/Ground Mil HDBK 217F assumptions
- IP Rating: IP30

### PHYSICAL

- Size: 6.44 x 4.06 x 1.44 in (16.35 x 10.32 x 3.65 cm)
- Weight: 16 oz (453.6 g)

### COMPLIANCE

- FCC, ROHS, CE Marked, ANSI
- Traceability to  $< 1$  microsecond  
(ref: [tf.nist.gov/general/pdf/3167.pdf](http://tf.nist.gov/general/pdf/3167.pdf))



Mount multiple units with the RM4 rack mount

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