EndRun TECHNOLOGIES
"Smarter Timing Solutions"

TDC3303 *Time Code Distribution Chassis*

2x10 Autoswitch Distribution Amplifier

The TDC3303 is a dual-input, ten-output, low-frequency distribution amplifier in a 1U rackmount chassis. TDC3303 provides ten isolated copies of an input signal and is ideal for distributing IRIG-A, B, E, G or H time code. Fault sensing of signal levels is provided on all inputs and outputs and status is easily visible via front-panel LED indicators. TDC3303 is monitored and controlled via a serial port and optional Ethernet network port. Dual power supplies are optionally available to provide the highest reliability for mission critical applications. TDC3303 is unique in the industry - no other low-cost system offers this combination of capabilities and performance.

Autoswitching

TDC3303 can be configured for single or dual input operation. If two inputs are available then the TDC3303 will monitor the input signals. If an input is removed or the amplitude is greatly reduced it will automatically switch to the other input. This failover feature ensures that your critical signals are always present should one of the inputs become unavailable or its level compromised.

Alarm Input

TDC3303 is compatible with the alarm output signal from the Meridian II and Tycho II Precision TimeBase time and frequency standards. If one of these units is sourcing the TDC3303 and its alarm output goes active, then the TDC3303 will automatically switch to the backup source. This alarm input may be cascaded to multiple TDC3303 units to support bank switching by simply connecting the inputs with coaxial cable and BNC T-adapters.

Status Indicators

Front panel LEDs provide you at-a-glance status of the distribution chassis. TDC3303 provides LED indicators for the power supply(ies), the two inputs, all output signals and a summary alarm indicator. The summary alarm is also available on a rear panel open-collector output BNC.

Control and Status Monitoring

TDC3303 can be configured and monitored by means of an RS-232 serial port. Both the switch and output status can be monitored in this way. For remote control and monitoring, a network port is available as an optional upgrade.

Dual Power Supplies

For the highest level of power source and supply fault-tolerance, the TDC3303 Time Code Distribution Chassis supports dual redundant, AC or DC power supplies. The two power supplies can be any combination of AC/AC, AC/DC, or DC/DC.

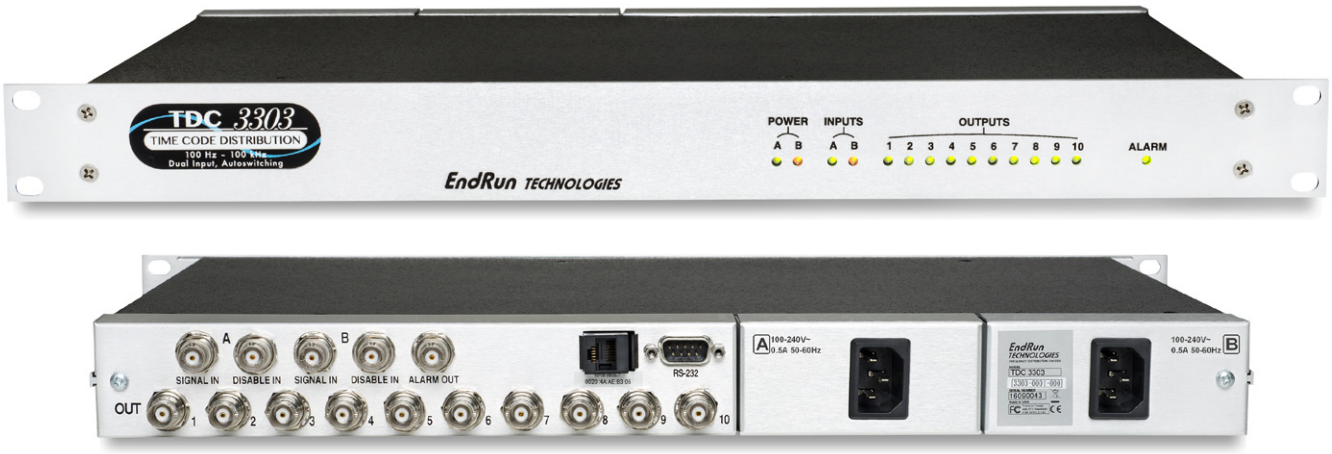
High Reliability

The TDC3303 uses EndRun's power-efficient, fanless design and thermal packaging that achieves an estimated MTBF of over 20 years. The system is made in America, backed by a two-year warranty, a 60-day money-back guarantee, and supported by EndRun's top notch technical support team free of charge!

FEATURES

- 10-channel, low-frequency sine wave distribution (100 Hz to 100 kHz).
- Ideal for IRIG-A, B, E, G or H time code distribution.
- Single input or autoswitching between dual inputs.
- High port-to-port isolation.
- RS-232 port for control and monitoring.
- Ethernet port option for remote control and monitoring.
- Dual-redundant AC or DC power supply options.
- 2-Year Warranty.
- 60-Day Money-Back Guarantee.
- Free technical support for life.

TDC3303 Time Code Distribution Chassis
Specifications



TDC3303 front and rear panel views. Shown with optional dual power supplies and Ethernet interface.

INPUTS (A and B):
- Carrier Frequency: 100 Hz to 100 kHz.
- Modulation Ratio: Any.
- Impedance: 50Ω (or 10 kΩ option).
- Amplitude: .7V peak-to-peak to 6 V peak-to-peak.
- Protection: Protected to 24V peak-to-peak.
- Connector: Rear-panel female BNC.

OUTPUTS (1 through 10):
- Impedance: 50Ω.
- Unity Gain: 0 dB, ±1dB.
- Port-to-Port Isolation: > 70 dB.
- Distortion: Harmonics < -50 dBc @ max output level.
- Protection: Outputs may be shorted to ground with no damage.
- Connector: Rear-panel female BNC.

EXTERNAL ALARM INPUTS (A and B):
- Normal State: TTL low.
- Alarm State: TTL high or high Z (internal 10k pull-up).
- Connectors: Rear-panel female BNCs.

ALARM OUTPUT:
- All fault indicators are summed providing a common alarm output.
- Open collector, 40 VDC max, 100 mA max saturation current.
- High impedance when fault condition exists.
- Connector: Rear-panel female BNC.

CONSOLE PORT:
- RS-232 serial port on DB9M connector for control and status information.
- User-selectable port settings: 9600 to 57600 baud; 7 or 8 data bits; odd, even or no parity; 1 or 2 stop bits. Factory default settings: 19200,8,n,1.

SYSTEM STATUS INDICATORS:
- Input LEDs: Green when a valid signal is detected and red when the signal is absent.
- Output LEDs: Green when the output signal is OK and red when a short is detected.
- Power LEDs: Green when the power supply is OK, and red when a fault condition exists.
- Alarm LED: Red when any fault condition exists.
  All fault indicators are summed to provide one common fault.

POWER:
- 90-264 VAC, 47-63 Hz, 0.5A Max. @ 120 VAC, .25 A Max @ 240 VAC.
- 110-370 VDC, 0.5A Max. @ 120 VDC.
- 3-Pin IEC 320 on rear panel, 2-meter cord included.

SIZE:
- Chassis: 1.75"H x 17"W x 10.75"D.
- Weight: < 5 pounds.

ENVIRONMENTAL:
- Operating Temperature: 0° to +50° C.
- Storage Temperature: -40° to +85° C.
- Operating Humidity: 5% to 90% RH, non-condensing.
- Storage Humidity: 5% to 95% RH, non-condensing.

COMPLIANCE:
- CE, FCC, RoHS, WEEE.

OPTIONS:
- Network Port: Ethernet 10/100Base-T; RJ-45 connector. Protocols include: SSH, DHCP, Telnet, SNMP MIB-II (management variables only).
- Dual-redundant AC or DC power supplies. Combinations can be AC/AC, AC/DC, or DC/DC.
- DC power supply: -48, +12, +24/28, or +125 VDC.

OTHER DISTRIBUTION CHASSIS:
- FDC3302 High-Performance Frequency Distribution Chassis
- FDC3300 Frequency Distribution Chassis
- PDC3301 Pulse Distribution Chassis

RELATED TIME AND FREQUENCY STANDARDS:
- Meridian II Precision TimeBase
- Tycho II Precision TimeBase

EndRun TECHNOLOGIES
"Smarter Timing Solutions"

Santa Rosa, CA, USA
1-877-749-3878 or 707-573-8633
sales@endruntechnologies.com
www.endruntechnologies.com