



OVERVIEW

Time synchronizing signals need to be communicated to devices that are diversified in their characteristics and operation.

Signal Converters are viable solution through which network of various devices can be connected to a centralized time synchronizing system. SERTEL manufactures wide range of converters that are accredited and delivers top performance.

Converters eliminate the challenge of time synchronizing diversified systems that are interoperable with each other. Transportation of data through set of rules forms the basis for communication at all industrial sectors.

The protocols are grouped depending on their features and equipments that use them. Converters bridges systems that follow wide range of standard protocols.

Translating the receiving information into another format forms the basis of converters. These are very essential in maintaining the network of varied devices to function in unison with time.

OPERATION

Network Time Protocol (NTP) is a common need for Ethernet connected devices such as management systems, IEDs and others. T-CON-300-I2N successfully delivers the time stamping signal in NTP format.

The IRIG-B serial protocol uses bit strings of approximately 100 bits repeated every second that carry time and control information.

IRIG-B is defined in code format IRIG-B xyz, where x is the modulation type, y is the frequency and z is the coding. There are two common IRIG-B protocol types: IRIG-B Amplitude Modulated (AM), IRIG-B Unmodulated (TTL/DCLS).

The number of NTP output ports in the converter varies and has separate IP addresses. Each port can time synchronize all the devices when it is connected to a network.

KEY FEATURES

- Dedicated IRIG-B ports each port are isolated completely.
- Supports following wide IRIG formats
- IRIG-A, IRIG-B, IRIG-E formats*
- IRIG-B [AM] – AMPLITUDE MODULATED
- IRIG-B [TTL/PWM] – UN MODULATED
- Act as a IRIG-B Hub / Booster
- Option to generate combination of IRIG-B – Modulated and Un-modulated signal
- Packed in DIN Rail Mount of compact size.
- Option for 19" Rack Mount if number of output port requirements are high
- Universal Power supply: 90 to 260V AC/DC
- Friendly user interface with plug- and-play feature.
- Low cost maintenance with durable performance

IRIG-B TO IRIG-B Multiplier
T-FSDA-300



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SERTEL INSTRUMENTS INC

Saskatoon,
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IRIG-B TO IRIG-B Multiplier

T-FSDA-300

TECHNICAL SPECIFICATIONS

IRIG-B to IRIG-B

Model	T-FSDA-300
Interface	TTL (Normal High)
Input connector	Phoenix / BNC
Output Rate	Every second
Power Supply	90-260 V AC/DC A & B

Display	2 x 16 LCD*
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MECHANICAL SPECIFICATION

Dimensions	1U(H) x 485(W) x 185(D) mm (Or) 2U(H) x 485(W) x 185(D) mm (Or) 3U(H) x 485(W) x 185(D) mm *Size Depends on number of outputs
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Mounting	DIN RAIL /Panel/Table Top/Wall
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Weight	2.0 KG
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Configuration Software

Platform	HTTPS/SSL Browser-based configuration
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ENVIRONMENT

Storage Temperature	-40 to +85 °C
Operating Temperature	-10 to +55 °C
Humidity	0 – 95% RH, non-condensing

Power Drain	30W max
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Power Supplies	1x or 2x Power Supplies High Voltage - AC/DC 90-370 VDC 80-260 VAC Low Voltage - DC 40-110 VDC *Feature Available only on Specific requests and suitable price points
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Ingress Protection	IP40
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Design	DIN Rail Mount 1U rack-mount bracket designed for 19 Inch Cabinets for more outputs Fabricated Heatsinks IP40 (Ingress Protection Rating)
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OUTPUT

Programmable Output (With Isolation)	TTL or AM IRIG-B Output (BNC) TTL Input/Output (BNC) *TTL over FO *Feature Available only on Specific requests and suitable price points
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INPUT

External IRIG-B	TTL/AM, BNC [F]
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Input	DC IRIG-B Input (BNC)
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TEST AND STANDARDS

Dry Heat Test	IEC 60068-2-2	Electrostatic Discharge Immunity Test	IEC 61000-4-2,2008
Cold Test	IEC 60068-2-1	Radiated Susceptibility Test	IEC 61000-4-3,2010
Damp Heat (Steady State) Test	IEC 60068-2-3	Electrical Fast Transient Immunity	IEC 61000-4-4,2012
Sinusoidal Vibration Test	IEC 60068-2-6	High Energy Surge Immunity Test	IEC 61000-4-5,2014
Dielectric Strength Test	IEC 60255-5-0	Conducted RF Immunity Test	IEC 61000-4-6,2013
Pulse Magnetic Field Test	IEC 61000-4-9,2016	Power Frequency Magnetic Field Test	IEC 61000-4-8,2009
Radiated RF Power Disturbance	CISPR 14-1,2009	Damped Oscillatory Sinusoidal Immunity Test	IEC 61000-4-18,2011
Voltage Fluctuation and Flicker Emission Test	IEC 61000-3-3,2013	Voltage Dips and Interruption Immunity Test	IEC 61000-4-11
Harmonics, Inter Harmonics and Low Frequency Immunity Test	IEC 61000-4-13,2002		



*Feature Available only on Specific requests and suitable price points
 *Output ports & Input Ports are customizable based on the requirements
 *Product development is continuous process, subject to change without prior notice



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