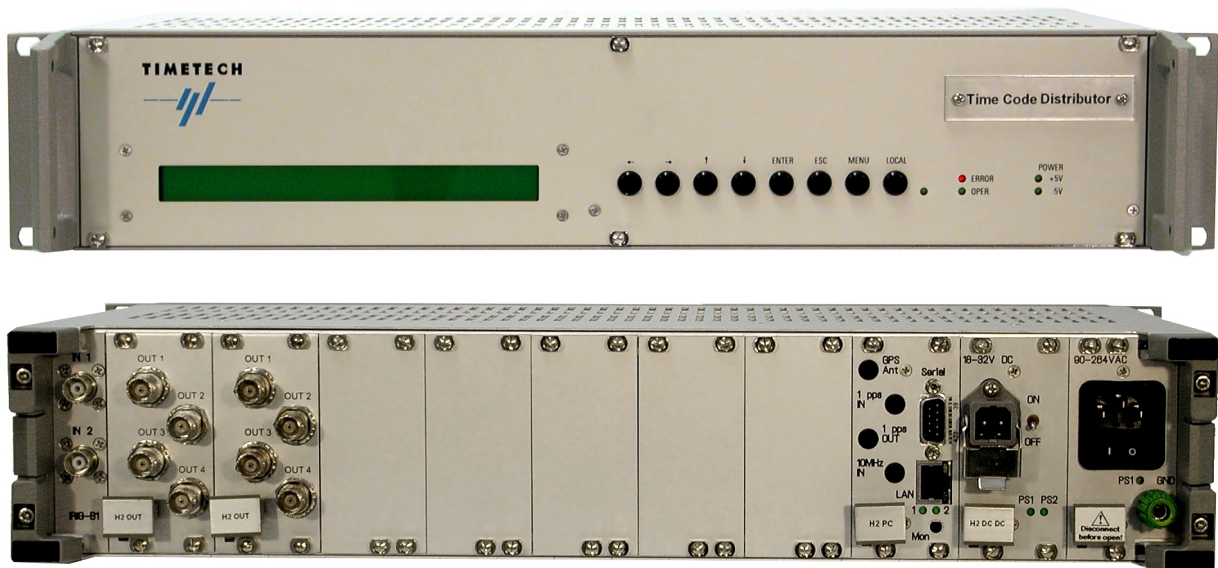


Time Code Distributor, modular

IRIG 100 Hz – 5 MHz, IRIG DC Shift, 1 PPS 2 redundant inputs, 8..28 outputs

Part No.: 10085



Key features:

- Hot pluggable distribution modules
- Low phase noise
- Two inputs, automatic or manual input selection
- All inputs and outputs monitored
- Configurable for IRIG modulated, IRIG DC Shift, 1 PPS
- Configuration and monitoring via serial line or TCP/IP
- Combinable with other TimeTech distribution units to form a complete Frequency and Time System

Time Code Distributor, modular

IRIG Distributor 100 Hz – 5 MHz, 1 PPS Distributor, 2 inputs, 8..28 outputs
Part No.: 10085



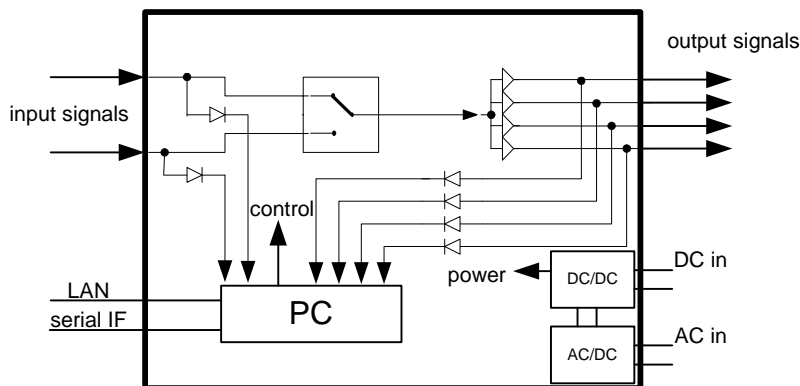
The IRIG Distributor is a two height unit rack mountable unit. This series is highly modular. The rear side consists of ten modules. Two of them are power supplies; one module holds the monitoring and control PC. Up to seven modules can be used for signal distribution.

The unit can be configured for modulated IRIG time code distribution, IRIG DC shift distribution, or for 1 PPS pulse distribution.

- IRIG modulated:
bandwidth 100 Hz .. 5 MHz, output impedance 50 Ohm, max input/output 10 Vpp
- IRIG DC Shift:
High load impedance required, max input/output $\pm 10V$ (unloaded)
- 1 PPS:
output impedance 50 Ohm, max input/output +5 V (pulse), no pulse 0 V.

The input signal can be fed with two independent inputs. The system monitors both continuously. The input channel can be selected manually on the front panel, remotely via LAN or serial interface, or automatically; i. e. the unit switches automatically to the standby channel if the active one fails.

All outputs are monitored; it can be checked, if they are open, loaded with nominal load, short or failed. Errors are logged and visible on the front display; they are reported via LAN and serial interface to any monitoring host.



Block diagram of the Time Code Distributor

Rear view unit configuration

Slot 0	Slot 1	Slot 2	Slot 3	Slot 4	Slot 5	Slot 6	Slot 7	Slot 8	Slot 9	Slot 10
Input Panel	Distributor Module	Distributor Module	Option slot	Option slot	Option slot	Option slot	Option slot	PC module	DC/DC Power Input	AC/DC Power Input
BNC 2 inputs	BNC 4 outputs	BNC 4 outputs						LAN IF	DC 18-32 V	AC 90-265 V

Time Code Distributor, modular

IRIG Distributor 100 Hz – 5 MHz, 1 PPS Distributor, 2 inputs, 8..28 outputs
Part No.: 10085



Option	Function	Slot
1	1 additional output module, total 12 outputs	3
2	2 additional output modules, total 16 outputs	4
3	3 additional output modules, total 20 outputs	5
4	4 additional output modules, total 24 outputs	6
5	5 additional output modules, total 28 outputs	7
6	2 nd DC input instead of AC input	10

Included Peripheral Equipment

- Hirschmann Stak 20 connector for self cable mounting for connection to the Stakei 2 DC connector at the unit,
- AC supply cord
- Serial interface cable

Specification

Signal Inputs

Number of inputs 2, selectable
Connectors BNC

1. IRIG modulated 100 Hz to 5 MHz input

Frequency modulated IRIG, carrier 100 Hz .. 5 MHz
Input impedance 50 Ω , 600 Ω or high impedance specify on order
Input level 1 V_{pp} to 10 V_{pp} (with nominal load)

2. IRIG DC Shift input

Input impedance 50 Ω , 600 Ω or high impedance specify on order
Input level ± 1 V .. ± 5 V (50 Ω , 600 Ω input impedance)
 ± 5 V .. ± 10 V (high input impedance only)

3. 1 PPS input

Input impedance 50 Ω , 600 Ω or high impedance specify on order
Input level 0 V .. +5 V

Signal Outputs

Number of outputs 8 (options for 12, 16, 20, 24, 28)
Connectors BNC

1. IRIG modulated 100 Hz to 5 MHz output

Gain 0 dB (-0.1, +0.25 dB) when loaded
Max. output level 10 V_{pp} (into 50 Ω)
Output impedance 50 Ω

2. IRIG DC Shift output

Gain 0 dB (unloaded)
Max. output level ± 10 V (unloaded)
Output impedance 50 Ω
Receiver minimum impedance > 3 k Ω

3. 1 PPS output

Gain 0 dB
Output level 0 V .. +5 V
Output impedance 50 Ω

Time Code Distributor, modular

IRIG Distributor 100 Hz – 5 MHz, 1 PPS Distributor, 2 inputs, 8..28 outputs
Part No.: 10085



Specification cont'd

M & C interface

Serial line	RS232, 9 pin Sub-D male
Protocol	19200 bps, 8N1, plain ASCII
Ethernet	10 Mbit twisted pair (RJ 45)
TCP services	telnetd (remote screen) port 23 command, data output port 2000, 2001
UDP services	syslog client port 514 tftp server port 69 data output port definable ntp server & client port 123
Monitored items	input presence, input levels (also standby input), active input, output presence, output levels, output status (open, loaded, short).
Commandable items	input channel selection, output mute

Electrical interface

Supply voltage DC	18 to 32 V DC
Supply voltage AC	90 to 265 V AC, 47 to 65 Hz
Source selection	Load sharing between AC and DC inputs
Power Consumption	< 50 Watts on AC, < 40 Watts on DC

Front panel:

Display	Instrument status & configuration, levels of inputs and outputs, selected input, alarms and messages, historic events
2 lines, 40 characters	
Buttons:	Access to all vital functions:
8 function keys	instrument setup & configuration, input and output monitoring, input selection

Mechanical

Outline	19 inch, 2 height units (448.8 mm * 88 mm) depth 224 mm
Weight	3 to 4 kg

Environmental

Transportation and storage

Temperature	-20°C to +75°C
Humidity	10% to 90% (non condensing)
Shock	max 10g acceleration for 11 ms
Vibration	max. 0.15 mm at 5 to 8 Hz, max 1g acceleration at 8 to 500 Hz
Altitude	< 20000 m

Operation

Temperature	-10°C to +50°C
Humidity	20% to 90% (non condensing)
Altitude	< 3000 m