

Technical Information

Operating Instructions

Signal Distribution Unit
SDU

Impressum

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The Modular System SDU IRIG/TTL

The Time Code Signal Distribution Unit SDU is a set of equipment composed of two modules from SDU-IRIG and/or SDU-TTL and a MEAN WELL T60-B, all installed in a metal desktop case MULTIPAC and ready to operate. The interfaces and input/output signals of the SDU-IRIG / SDU-TTL are accessible via connectors in the back panel of the case.

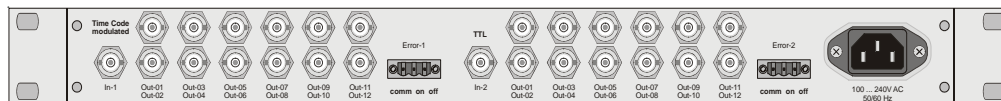
Details of the components are described below.

SDU IRIG/TTL in desktop case MULTIPAC

front view



back view



Timecode Distribution SDU/IRIG

The Board SDU/IRIG was designed for the distribution of IRIG-A/B Timecode signals. It is equipped with an adjustable input amplifier as well as twelve output buffers. The signal outputs are available via BNC connectors. By means of signal LED's, the status of the Board is identifiable. Due to the input amplifiers adjustable gain, the boards are cascable. The SDU/IRIG contains a error detection for losing signal output, this ERROR state is signed by the Alarm LED on the front panel, and by the ERROR output connector on the back panel.

During "OK" State the connection of the Relay is between: comm - on
During "ERROR" State the connection of the Relay is between: comm - off

The SDU/IRIG is available in two different Modules

Modul TCM: Time Code modulated unbalanced

Modul TCB: Time Code modulated balanced

Specifications :

Inputs:	IRIG-A/B Signal or similar timecode with sinusoidal carrier
Input Voltage Range:	0.5V _{pp} ...4V _{pp}
Input Impedance:	50Ohm / 600 Ohm, DC-Insulated
Outputs:	balanced or unbalanced 12 x IRIG-A/B Signal (or similar Timecode)
unbalanced	3V _{pp} (MARK), 1V _{pp} (SPACE) at 50 Ω for IRIG common GND for all outputs
balanced	2V _{pp} at 600 Ohm, with isolated BNC connector
Gain:	adjustable automatic Gain control
Connectors:	
Inputsignal	1 x BNC isolated connector
Outputsignal	12 x BNC isolated connector

TTL Distribution Card SDU/TTL

The Board SDU/TTL was designed for the distribution of TTL signals. The input connection is a BNC connector, the input signal is driven to twelve output buffers, which are capable of driving 50 Ohm loads. The signal outputs are available via BNC connectors.

The SDU/TTL contains a ERROR detection for losing signal output, this ERROR state is signed by the Alarm LED on the front panel, and by the ERROR output connector on the back panel.

For correct error detection on a PPS signal, a minimum pulse width of 100ms is required, shorter pulse width signals are possible on request.

During "OK" State the connection of the Relay is between:	comm - on
During "ERROR" State the connection of the Relay is between:	comm - off

Specifications :

Inputs:	TTL Signal (IRIG_DC, PPS, 10MHz, ...)
Input Voltage Range:	TTL
Outputs:	12 x TTL
Output Voltage Range:	TTL
Output Impedance:	2.5Vat 50 Ohm load common GND for all outputs
Connectors:	1 x BNC- Connector Inputsignal 12 x BNC- Cconnector Outputsignal

Technical Specifications SDU /MP

HOUSING: Metal desktop case, MULTIPAC Schroff
Front panel: 1 U / 84 HP (43.6 mm high / 426.4 mm wide)

**PROTECTION
RATING:** IP20

**PHYSICAL
DIMENSIONS:** 482,6 mm wide x 43,7 mm high x 280 mm deep

CE-Label



This device conforms to the directive 89/336/EEG on the approximation of the laws of the Member States of the European Community relating to electromagnetic compatibility.

Technical Specifications Power Supply MEAN WELL T-60B

LINE INPUT

VOLTAGE: 100 ... 240 VAC

FUSE: electronic

OUTPUT CURRENT

LIMITING: 105 - 150% $I_{out\ nom}$

OUTPUT

VOLTAGE: V_{out} : 5V / 5A

CONNECTOR: screw terminal

MOUNTING

FRAME: Metal housing: 159 mm x 97 mm x 38 mm

AMBIENT

TEMPERATURE: -10 ... +60°C

HUMIDITY: 90% max.

EMC

STANDARDS: CISPR22(EN55022) CLASS B,
IEC801-2,3,4,
IEC555-2 VERIFICATION

Control LEDs

POWER: LED green, output voltage OK

Technical Specifications Power Supply SD-25A-5 (DC)

LINE INPUT

VOLTAGE: 9 ... 18 VDC

FUSE: electronic

OUTPUT CURRENT

LIMITING: 105 - 150% $I_{out\ nom}$

OUTPUT

VOLTAGE: V_{out} : 5V / 5A

TOTAL LOAD: 25Watt max.

CONNECTOR: screw terminal

MOUNTING

FRAME: Metal housing: 98.5 mm x 97 mm x 36.5 mm

AMBIENT

TEMPERATURE: -10 ... +60°C

HUMIDITY: 90% max.

EMC

STANDARDS: EN55022 class B
EN61000-4-2,3,4,6,8
ENV50204

Control LEDs

POWER: LED green, output voltage OK

Technical Specifications Power Supply SD-25B-5 (DC)

LINE INPUT

VOLTAGE: 19 ... 36 VDC

FUSE: electronic

OUTPUT CURRENT

LIMITING: 105 - 150% $I_{out\ nom}$

OUTPUT

VOLTAGE: V_{out} : 5V / 5A

TOTAL LOAD: 25Watt max.

CONNECTOR: screw terminal

MOUNTING

FRAME: Metal housing: 98.5 mm x 97 mm x 36.5 mm

AMBIENT

TEMPERATURE: -10 ... +60°C

HUMIDITY: 90% max.

EMC

STANDARDS: EN55022 class B
EN61000-4-2,3,4,6,8
ENV50204

Control LEDs

POWER: LED green, output voltage OK

Technical Specifications Power Supply SD-25C-5 (DC)

LINE INPUT

VOLTAGE: 36 ... 72 VDC

FUSE: electronic

OUTPUT CURRENT

LIMITING: 105 - 150% $I_{out\ nom}$

OUTPUT

VOLTAGE: V_{out} : 5V / 2.1A

TOTAL LOAD: 25Watt max.

CONNECTOR: screw terminal

MOUNTING

FRAME: Metal housing: 98.5 mm x 97 mm x 36.5 mm

AMBIENT

TEMPERATURE: -10 ... +60°C

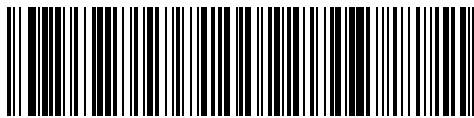
HUMIDITY: 90% max.

EMC

STANDARDS: EN55022 class B
EN61000-4-2,3,4,6,8
ENV50204

Control LEDs

POWER: LED green, output voltage OK



SDU IRI G/ TTL - E- 110608