

CLEBER-SRS FM audio gateway



CLEBER-SRS R12K14

DESCRIPTION

Cleber offers a powerful, flexible and modular hardware and software platform for broadcasting and contribution networks, where customers can install up to six boards with no limitations in terms of position and number. Based on a Linux embedded OS, it detects the presence of the boards and shows the related control interface to the user, either through web GUI and Touchscreen TFT display. Power supply can be single (AC and/or DC) or dual (hot swappable for redundancy); customer may choose between two ranges for DC sources, that is 22-65 or 10-36 Vdc for site or DSNG applications.

Despite Cleber supports any combination of boards, it is possible to describe separately some particular applications, such as gateway from MPX-FM to DVB-ASI. SRS-06 board digitalizes 4 FM-MPX and 4 FM radio channels (88-108 MHz), providing a generic ASI stream suitable for transport through broadcast radio links; it is possible to assign a PID to each channel and also insert a timestamp for coherent conversion of the received signal; furthermore, the optional GPS board let the system generate timestamps synchronized with an absolute 10 MHz reference.

In the receiving site, SRS-07 locks the ASI signal and gives back 4 MPX-FM outputs, as well as a common RF output with up to 8 carriers modulated by each MPX (88-108 MHz range); if equipped with GPS receiver, the system is able to transmit each FM signal with prefixed delay, allowing the synchronization between different stations. Parameters control and monitoring is possible through TFT touchscreen display and web interface or SNMP.

FEATURES

- Compact solution (1U RACK 19")
- Six plug-in slots available for any combination of boards
- TFT touchscreen for local management
- Embedded Linux OS
- Single or dual power supply (AC and/or DC)
- WEB interface, SNMP v2 and GPIO
- Software Radio Techniques
- Excellent S/N
- Excellent stereo separation
- Very low harmonic distortion

SPECIFICATIONS

General

S/N (unweighted): > 70 dB
S/N (weighted): > 65 dB
Stereo separation: > 40 dB
THD: < 0.1%
Bitrate: < 2 Mbit/s per channel

SRS-06 (coder FM/MPX-ASI)

Inputs: 4 x MPX FM (0-100 KHz)
4 x FM (88-108 MHz)

Connectors: 5 x BNC 75 and 50 Ω
FM channels: 4
MPX channels: 4

Outputs:

Tipo: 1 x DVB-ASI
ASI Format: 188 bytes
Connector: BNC 75 Ω

SRS-07 (decoder ASI-FM/MPX)

Inputs:
Type: ASI (requires SRS-06)
ASI format: DVB-ASI 188 bytes

Connector: BNC 75 Ω
Outputs: 4 x MPX FM (0-100 KHz)
1 x FM (88-108 MHz)

Connector: BNC 75 and 50 Ω

D_GPS (GPS references distribution)

Inputs:
Type: 1 x 10 MHz
1 x PPS

Connectors: BNC 50 Ω

Control

Front panel (TFT touchscreen display)

Web browser (embedded http server, no additional software needed)

SNMP v2

Electrical

Power Supply: AC 100-240 V~ 50/60 Hz IEC 320

DC 2 pins plug:

- DC 22 \div 65 V
- DC 10 \div 36 V

Consumption:

Chassis: 4.5 W
SRS-06: 7 W
SRS-07: 12 W

Mechanical

Chassis: 1U Rack 19"

Dimensions:

Width 482.5 mm
Height 43.65 mm
Depth 399.47 mm
380.65 mm (without connectors)
357.80 mm (without connectors and handles)

Weight:

Basic: 2.5 Kg
Max: up to 7 Kg (depending on number of plug-in boards installed)

Environmental

Operating

temperature range: -10 \div 55°C

Relative humidity: 0 - 95% non-condensing

Code	Description
RK610	Modular chassis 1U 19", 6 plug-in slot, power supply AC+DC, web interface, SNMP
SRS-06	Slot Plug-in 4 MPX input, ASI output with GPS sync
SRS-07	Scheda Plug-in ASI input, 4 MPX output with GPS sync
OPT-RK610/AC40/DUAL	opt PSU dual AC/DC, hot-swappable
OPT-RK610/AC40/SINGLE	opt PSU single AC/DC with the possibility to add a second
OPT-RK610/AC40/SINGLE2	opt PSU additional AC/DC
OPT-RK610/DC01/DUAL	opt PSU dual DC/DC, independently replaceable 10-36 Vdc - 120W
OPT-RK610/DC01/SINGLE	opt PSU single DC/DC with possibility to add a second PSU 10-36 Vdc - 120W
OPT-RK610/DC01/SINGLE2	opt PSU DC/DC additional 10-36 Vdc - 120W
OPT-RK610/DC02/DUAL	opt PSU dual DC/DC, independently replaceable 22-65 Vdc - 120W
OPT-RK610/DC02/SINGLE	opt PSU single DC/DC with possibility to add a second PSU 22-65 Vdc - 120W
OPT-RK610/DC02/SINGLE2	opt PSU DC/DC additional 22-65 Vdc - 120W



* Elber reserves the right to modify this datasheet without notice.

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