ELBER
WIRELESS INSIGHT

CLEBER-XS4 DVB-S/S2 Multistream Receiver

CLEBER-XS4 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 or 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 chose between two ranges for DC sources, that is 22-65 or 10-36 Vdc for site or DSNG applications.

Thus Cleber can host any combinations of boards, there are particular applications and use cases that can be considered and described separately.

For satellite DVB-S2 contribution to transmitting sites in a TV or radio network, a multistream or single stream receiver is available; this is the XS4 board, equipped with one L-band input and four ASI outputs. The receiver can be connected with any kind of LNB and it's protected against overvoltages. The DVB-S2 features a very low end-to-end delay and reduced overall jitter even in multistream configuration (it supports up to 4 ISI simultaneous demodulation in QPSK/8PSK and two ISI in 16-32APSK). Furthermore, it is possible to have a shortened analysis of TS based upon ETR 101.290, so as to check TS availability and errors.

A very intuitive WEB interface let the user configure and monitor very quickly the equipment, without dedicated software.

All this features make the CLEBER-XS4 the best solution for distribution and contribution networks to feed TV and Radio Transmitters.

FEATURES

- Self-contained compact solution (1U RACK 19")

- 6 slots to install any type of boards

- DVB-S/S2 Receiver

- L-band input

- Single stream and Multi stream

- 4 DVB-ASI outputs

- TS analysis embedded

- TFT front panel control

- Embedded Linux OS

- Single or Dual Power supply (Hot Swappable)

- WEB interface, SNMP v2 and GPIO

SPECIFICATIONS

General

Standards :	ETSI EN 300 421 (DVB-S)
	ETSI EN 302 307 (DVB-S2)
Input connector:	F-type connector 75 ohm
RF Input:	L-band with LNB control
Frequency range:	950-2150 MHz
RF input level:	40 to 100 dBuV
Symbol Rate:	1-45 Msymb/s (DVB-S)
	2-45 Msymb/s (DVB-S2)
FEC:	all (auto)
Constellation:	QPSK, 8PSK, 16APSK, 32APSK
DVB-S2 support:	
Mode:	CCM, VCM, ACM,
	Normal/Short FEC frames
BB header processing:	
	ISSY short/long, NPD
Mode Adaptation:	Multistream reception with ISI field
	4 ISI QPSK-8PSK
	2 ISI 16-32 APSK
PLS:	Supported
Outputs:	
Connectors:	4 x BNC 75 Ω
ASI Format:	DVB-ASI 188 bytes packet

Control

Front panel (TFT touchscreen display)
Web browser (embedded http server, no additional software needed)
SNMP v2

Electrical

Supply:	**AC** 100-240 V~ 50/60 Hz IEC 320
	DC 2 pins plug:
	• DC 22 ÷ 65 V
	• DC 10 ÷ 36 V
Power consumption:	
Basic:	4.5W
XS4:	7.5W

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 handles and connectors)	
Weight:		
Basic:	2.5 Kg	
Max:	up to 7 Kg (depending on number of slots)	

Environmental

Operative Temperature Range:	-10 ÷ 55°C
Relative humidity:	0 - 95% non condensing

ORDERING INFO:

Code	Description
RK610	Modular chassis 1U 19", 6 plug-in slot, power supply AC+DC, web interface, SNMP
XS4	DVB-S/S2 receiver plug-in board for RK610, Single/Multistream, L-Band input , 4 ASI outputs
OPT-RK610-AC	AC PSU option for RK610
OPT-RK610-AC-DC-10-36	PSU option AC and DC 10-36 V for RK610
OPT-RK610-AC-DC-22-65	PSU option AC and DC 22-65 V for RK610
OPT-RK610-DC-10-36	PSU option DC 10-36 V for RK610
OPT-RK610-DC-22-65	PSU option DC 22-65 V for RK610
OPT-RK610-AC-DUAL	opt PSU dual AC/DC, independently replaceable
OPT-RK610-AC-SINGLE	opt PSU single AC/DC with possibility to add a second PSU
OPT-RK610-AC-SINGLE2	opt PSU single AC/DC with possibility to add a second PSU

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