

RK 1000 DVB-ASI/SDI/HD-SDI Change-Over



RK1000 rev2k13

DESCRIPTION

The RK1000 can be used by television networks in high frequency networks for the DVB-ASI signal distribution in DVB-T/H/T2 networks as well in low frequency systems for the routing or the distribution of SDI/HD-SDI/DVB-ASI signals.

The device is composed of a basic 3U 19" chassis that can host up to 10 hot-swappable modules, allowing an easy maintenance and stock management. The back panel is composed of independent units according to the type and the quantity of modules installed; the panels are connected to an internal motherboard, as well as the front panel modules.

The distribution board, AD-02, has one input and nine outputs; the input signal is equalized and re-clocked before it passes to the analysis for the monitoring and to the amplification for the distribution; a loop-through output is available in case of electrical black-out.

The change-over module, called CO-01, allows up to 3 inputs (Main, Back-up and Disaster Recovery) and has 7 outputs (the first one is connected to the main input with a relay normally closed contact); in case of DVB-ASI connection, the module operates a seamless switch between the main and the back-up input, evaluating the TS content regarding the TS Loss, Sync Loss, PAT Loss, Continuity Counter Error and TEI (each one can be enabled/disabled through the user interface). In case of HD/SD-SDI signals the switch evaluates only the signal presence.

The switch can be revertible or not revertible, automatic or forced.

The management software offers a complete control of the device's parameters, using an intuitive user interface equipped with an http native web interface, developed with particular care for an easy and immediate use, and through SNMP.

FEATURES

- Modular Chassis 3U 19"
- Up to 10 hot-swap slots
- Active ASI/SDI/HD-SDI distributor
- 3 inputs intelligent ASI/SDI/HD-SDI Change-over
- Redundant hot-swappable power supply (AC)
- Web interface e remote control SNMP
- GPIO

SPECIFICATIONS

Change Over

Module name:	CO-01
Input Interface:	DVB-ASI/SDI/HD-SDI
Inputs:	3
Input Connectors:	BNC(f) 75 Ohm
Output Interface:	DVB-ASI/SDI/HD-SDI
Outputs:	7 (1 pass-through)
Output Connectors:	BNC(f) 75 Ohm
Modality:	Automatic (Change-over) <ul style="list-style-type: none">• With priority (reversible)• Without priority (not reversible) Forced (Selector)
Priority:	Configurable
Switching criteria (DVB-ASI):	<ul style="list-style-type: none">• PAT Loss• TS Unstable• Sync Loss• Sync Unstable• Transport Error• Other on request
Switching criteria (HD-SDI/SDI):	Signal presence

ASI Distributor

Module Name:	AD-02
Input Interface:	DVB-ASI/SDI/HD-SDI
Inputs:	1
Input Connectors:	BNC(m) 75 Ohm
Output Interface:	DVB-ASI/SDI/HD-SDI
Outputs:	9 (1 pass-through)
Output Connector:	BNC(m) 75 Ohm

Technical Features

- Automatic input equalization
- Automatic output squelching when no input available
- Low jitter: 180pspp @ 270 Mbps on 200 meters of coaxial cable Belden 8281
- Input excellent return loss: 19 dB @ 270 MHz

Control

Web interface
SNMP v2

Electrical

Supply:	90-260 V~ 50/60 Hz IEC 320
Consumption:	60 W (ASI) 80 W (SDI)

Mechanical

Chassis:	3U Rack 19"
Dimensions:	Width 482.6 mm Height 43.6 mm Depth 554.85 mm Weight 12 Kg

Environmental

Operating Temperature Range:	-10 ÷ 55°C
Relative Humidity:	0 - 95% not condensing

ORDERING INFO:

Code	Description
RK1000	Basic chassis
CO-01	DVB-ASI/SDI/HD-SDI Change-over module
AD-02	DVB-ASI/SDI/HD-SDI Distributor module
OPT.1000/AC/125W	Power Supply RK1000

*Elber reserves the right to make changes to specification of products described in this datasheet at anytime without notice and without obligation to notify any person of such changes.



ELBER Srl. Via Pontevicchio, 42W - 16042 Carasco (GE) Italy
Phone +39.0185.351333 fax +39.0185.351300
www.elber.com - elber@elber.it