

RipEX-HS – Master Station

RipEX HS



RipEX2-HS

- 1+1 hot redundancy
- Two standard RipEX units inside
- Hot swappable
- Independent power supplies
- AC/DC power supply options
- Automatic changeover
- Switch-over time < 2 s
- Auto toggle mode
- 19' rack 3U
- 1x ETH, 1x SFP, 1x COM
- 4x HW alarm output
- -40 to +70 °C

RipEX-HS is a hot-standby master station, 1+1 redundant, fully monitored, hot swappable equipment.

It is assembled with **two standard RipEX units**, each powered by its own **independent power supply**. A controller takes care of **automatic changeover** in case of failure. Changeover conditions are widely configurable. Since both units are booted and use identical MAC addresses, exceptional switch-over time of less than 2s is achieved.

Fully redundant **option (RipEX2-RD) without any controller and switching is available** for RipEX2. Redundant connection of connected technology and redundant antennas are mandatory whereas they are optional for RipEX2-HS.

LED panels, HW alarm outputs, SNMP traps and standard RipEX units inside makes RipEX-HS configuration and control quite easy and maintenance can be done by anyone familiar with RipEX.



RipEX-HS

The same as RipEX2-HS except:

- 3x ETH, 2x COM
- Internal fan
- One way mounting
- Always with controller
- Only without int. duplexer

Functionality

There are two **standard RipEX units** with identical configurations inside RipEX-HS. **Both** units are **booted**, however only **one** is **active**. The interfaces – Ethernet, COM, (SFP), Antenna of the second unit are disconnected.

When the **active unit** status changes to “**down**” (when a controlled value exceeds the respective threshold), the controller **automatically switches** all interfaces to the **second unit** and it takes over all functions. Since both units are using the same MAC addresses (MAC cloning), there is a **minimal drop-out** while switching, less than **2s**.

SNMP trap with each switch-over can be sent (depending on configuration) to central SNMP management.

Operating modes

- **Auto** – primary active is RipEX “A”, when it fails, controller automatically switches-over to RipEX “B”
- **Auto toggle** – the same as Auto mode, in addition after set time controller automatically switches-over to RipEX “B”, even if “A” doesn't have any alarm and uses “B” for set period in order to confirm that RipEX “B” is fully ready-to-operate
- **A** – only RipEX “A” is active and controller will never switch to RipEX “B”
- **B** – only RipEX “B” is active and controller will never switch to RipEX “A”
- Operating modes can be set by HW switch on the front panel. RipEX2-HS “Auto toggle” mode is configured by SW when “Auto” is set on the switch

Technical parameters

Radio parameters	RipEX-HS	RipEX2-HS
	The same as RipEX units used	The same as RipEX units used
Hot Standby		
Switch-over time	< 2 s	
Electrical		
Primary power	100 – 240 VAC, 50 – 60 Hz 36 – 60 VDC, positive grounding possible	
	11 - 30 VDC	10 - 30 VDC 18 - 30 VDC, positive grounding possible
	Individual power supply for each RipEX2 unit	
Power consumption	HS own consumption typically <10 W (+ 1× Rx + 1× Rx/Tx of individual units)	
RipEX-HSB – Battery pack	For AC power model Output 2 x 24 V / 7,2 Ah	No
Interfaces		
Ethernet	3× 10/100Base-T Auto MDI/MDIX, RJ45	1× 10/100/1000 Base-T Auto MDI/MDIX, RJ45
SFP	No	1× 10/100/1000Base-T/1000Base-SX/1000Base-LX
COM 1	RS232, DB9F, 300 – 115 200 bps	RS232/RS485 SW configurable, DB9F, 300 bps – 1 Mbps
COM 2	RS232/RS485 SW configurable, DB9F, 300 – 115 200 bps	No
USB	USB 1.1 / Host A, for each RipEX unit	USB 3.0 / Host A, for each RipEX2 unit
Antenna	N-female(s) / 50 Ohms	
Enviromental		
IP Code (Ingress Protection)	IP20	IP30
MTBF (Mean Time Between Failure)	> 500.000 hours (> 50 years)	> 900 000 (> 100 years)
Operating temperature	–10 to +60 °C (14 to 140 °F) - standard –40 to +70 °C (-40 to + 158 °F) - optionally	–40 to +70 °C (-40 to +158 °F)
Humidity	5 to 95% non-condensing	
Storage	–40 to +85 °C (–40 to +185 °F) / 5 to 95 % non-condensing	
Internal fans	Automatically start-up when temperature exceeds 50 °C	No
Mechanical		
Dimensions	19" rack 3U 482 W × 401 D × 133 H mm (18,98 × 15.79 × 5,24 in)	19" rack 3U 442 W × 392D × 120H mm (17.40 × 15.43 × 4.72 in)
Weight	7.1 kg (15.7 lbs), RipEX unit excl. 9.1 kg (20.1 lbs), RipEX unit incl.	8.9 kg (19.6 lbs), RipEX2 unit excl. 12.1 kg (26.7 lbs), RipEX2 unit incl.
Diagnostic and Management		
	Same tools as with standard RipEX units used	
LED panels	Standard RipEX LED panel: Power, ETH, COM1, COM2, Rx, Rx, Status	Standard RipEX2 LED panel: SYS, AUX, RX, TX, COM HS controller: A, AUTO, B, SFP
HW Alarm outputs	RipEX A, RipEX B, Switch, Power	RipEX2 A, RipEX2 B, Controller, General alarm
Standards	CE, FCC	

