



## 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
- 1× ETH, 1× SFP, 1× 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:

- 3× ETH, 2× 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
<b>Hot Standby</b>		
Switch-over time	< 2 s	
<b>Electrical</b>		
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	
RipEX-HSB – Battery pack	For AC power model Output 2 x 24 V / 7,2 Ah	No
<b>Interfaces</b>		
Ethernet	3x 10/100Base-T Auto MDI/MDIX, RJ45	1x 10/100/1000 Base-T Auto MDI/MDIX, RJ45
SFP	No	1x 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	
<b>Environmental</b>		
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
<b>Mechanical</b>		
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.
<b>Diagnostic and Management</b>		
	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
<b>Standards</b>		
	CE, FCC	

