

# PUMA



## Rebroadcast is a serious matter

Whenever FM broadcasters requires a cost effective solution to deliver and re-broadcast FM content, Puma is the cutting edge, most complete and innovative equipment on the broadcast market.

**Puma** is high quality frequency-agile FM Re-Broadcast receiver which sets new industry standards in hardware DSP-based radio equipment.

**Puma** provides RF-FM Monitoring functionalities and an Audio-over-IP encoder in a single equipment. Thanks to its internal digital-based DSP improved FM tuner, **Puma** returns a complete MPX signal from the received FM frequency. The MPX circuit optimization assures a high quality MPX signal that can be used to feed directly an FM transmitter or a different MPX signal path with amazing MPX performances. The internal tuner guarantees high performance in FM reception, RF and MPX audio analysis and RDS data stream output.

The monitoring process operated on the FM channels can be a basic RF analysis or an advanced RF, MPX and AUDIO measurement. Mono level, Pilot level, Audio and RDS levels are measured and kept always under control. A threshold can be set for all parameters surveyed; if one or more values drift out of range, alarms are delivered.



All captured data during FM channels monitoring can be sent to a Network Management System (such as

### AxelTech's

Ranger) or showed in a common web page via SNMP V2 protocol. Once the RF signal is received, audio should be streamed from the transmitter site back to a remote logging system.

**Puma** is also features an external input source both analog (Left+Right) and AES/EBU. This audio input is continuously monitored: silence detection (Threshold/time and level), left and right presence, peak left, peak right.

Tuner output is available on rear-panel audio connectors on Analog or AES/EBU format .

**Puma** provides a large variety of additional connections: double Ethernet port, USB and front panel headphone output, 4x

GPIn opto coupled and 4x GPOut over relays. RS232 serial port for RDS-UECP bridging and rebroadcasting purposes. MPX signal is output through BNC connector.

**Puma** was developed with the latest technology in a fanless hardware format and free of wear parts of any kind. Thorough tests, performed also by end users, showed that **Puma** circuits are extremely reliable and unaffected by any kind of radiofrequency interferences.

## Highlights

- ☑ High quality FM Tuner
- ☑ RF Frequency agile 87,5 – 108,0 MHz
- ☑ Built-In RF, MPX, AUDIO and RDS monitoring system
  - ☑ RDS decoder and data output in UECP format
  - ☑ Embedded web server for worldwide consultation
- ☑ Audio over-IP streaming, Icecast2 Server, Low bandwidth mode
- ☑ SNMP and HTTP web interface and FTP supported
- ☑ Double Ethernet ports and double USB interfaces
- ☑ High shielded from strong RF fields

Front LCD display and front panel headphone output