

SIR 2110

Multi-Channel VHF/UHF Digital Broadband 1 RU Tuner



20 to 3000 MHz

Compact high performance wideband receiver for search and interception

The SIR 2110 covers the VHF/ UHF frequency range from 20 to 3000 MHz. Its modular and flexible design allows various configurations to incorporate different scenarios from manual interception to automatic communication intelligence (COMINT).

Additionally to the 20 MHz broadband I/Q data up to twenty 50 kHz wide DDC channels can be streamed to different addresses. The SIR 2110 provides an excellent dynamic range (IMFDR) of > 80 dB.

Features

- Excellent dynamic range (> 80 dB) for signals from 20 to 3000 MHz frequency
- Twenty integrated virtual narrowband receivers (twenty DDC channels each with 50 kHz)
- Wideband I/Q data output of 20 MHz (I/Q data 16 bit)
- Zoom spectrum (1 kHz frequency resolution)
- Power density spectrum of 24 MHz bandwidth
- Built In Test Equipment (BITE) for every internal module / via SNMP interface

AGF
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Reseller in North America

Specifications

SIR 2110 – Multi-Channel VHF/UHF Digital Broadband 1 RU Tuner

Characteristics

Frequency range	20 to 3000 MHz
Coherent bandwidth	24 MHz analogue / 20 MHz 16 bit I/Q data output
DDC channels	20 x 50 kHz bandwidth
Tuning resolution	< 1 Hz
Gain	automatic, manual or automatic with user defined shift (AGC + M)
Maximum input level	+15 dBm (non-destructive)
Noise figure	typ. 9 dB
MDS (Minimum Detectable Signal)	-135 dBm (at 1 kHz resolution)
IMFDR 3 (Intermodulation Free Dynamic Range)	> 80 dB
IP2	> 50 dBm (at 0 dBm and with AGC)
IP3	> 25 dBm (at 0 dBm and with AGC)
IF rejection	> 120 dB
Image rejection	> 110 dB typ.
Frequency stability	$\pm 10^{-7}$
Frequency drift	< $\pm 5 \cdot 10^{-7}$ ageing/year

Interfaces

Antenna input	N-connector female (nominal impedance 50 Ω)
Input for external reference frequency	BNC-female (10 MHz)
Input for time synchronisation	BNC: pulse per second (PPS)
Network interface	2 x Gigabit Ethernet (for control and data)
Service connection	RS-232
Operating voltage	85 to 264 VAC (50/60 Hz)
Maximum power consumption	150 VA (integrated power supply)

Environmental data

Operating temperature	0° C to +50° C
Storage temperature	-40° C to +70° C
Humidity	$\leq 85\%$ (non-condensing)
Environmental standards maintained	EN61010-1:2002 EN61000-6-2:2002 EN61000-6-3:2002

Mechanical data

Width	19" (482.6 mm)
Height	1 RU (44.5 mm)
Depth	490 mm
Weight	9 kg