



RF-6G RF FRONT-END

500kHz – 6GHz

Super Wide-band RF Tuner for your high-end signal interception system!

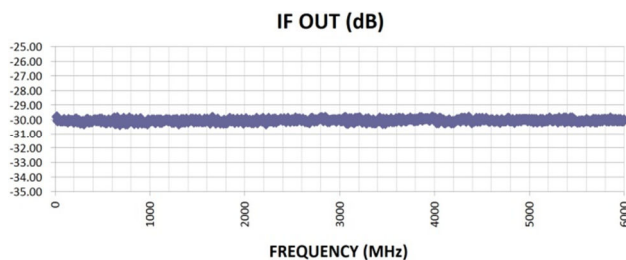
MAIN FEATURES

- 500kHz-6GHz super wide-band coverage
- Ultra-fast switching synthesizer < 3ms
- +/-0.1ppm frequency stability
- RF to IF gain +30dB (+/-2dB)
- 20MHz wide high-linearity IF bandwidth
- Excellent phase noise performance
- 2 interfaces: High-speed SPI 10Mbps and Asynchronous (PH5)

On all frequencies, RF-6G provides excellent tuning characteristics needed for professional signal analysis and signal strength measurement. Typical applications for RF-6G is the integration into high-end monitoring systems dedicated to wide-area radio monitoring, interference detection and investigation, field-strength measurements, frequency analysis, radio propagation research, close range detection of illegal eavesdropping devices.

SUPERB IF-OUT ACCURACY

The 45.05 MHz IF analog output offers 20MHz (+/-10MHz) of bandwidth for external peripherals. Precise factory calibration ensures that the IF output is correlated to the antenna input within only +/-2dB, and this on the entire 500kHz – 6Ghz receive range!



LOW NOISE DOWN CONVERTER

The 3GHz to 6GHz portion is realized by cleverly designed, internal down conversion circuitry, offering ultra-low noise figures comparable to high-end microwave-only receivers.

DDS LOCAL OSCILLATOR

Direct digital synthesizer is employed for the 1st local oscillator to ensure ultra-fast frequency switching of less than 3mS.



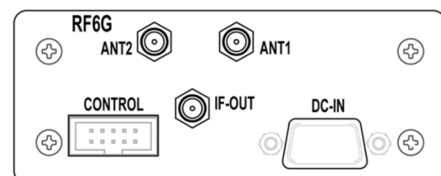
CUSTOMIZATION

AOR offers customization of RF-6G and can also undertake custom development. Feel free to contact us to discuss your exact requirements.

SPECIFICATIONS

Input freq. range	500kHz – 6GHz
Tuning resolution	1Hz
Frequency stability	+/-0.1ppm
Frequency switching	<3mS
Output frequency	45.05MHz
Output bandwidth	20MHz (*)
Gain	30dB
Gain flatness	+/-2dB
Noise figure	11dB typ. @ < 1GHz
Max. input level	+15dBm
Attenuation control	0, -10, -20dB @ <1GHz
IP3	>3dBm @ <3GHz
Antenna input	2 x SMA (selectable)
Input impedance	50Ω
Output impedance	50Ω (SMA)
Control interfaces	◎ SPI (IDC-10P) 10Mbps ◎ Asynchronous (PH5) 115.25kbps
Operating voltage	DC 10.7V-16V (DB-9)
Power consumption	Approx. 1.2A @ 12V
Dimensions	250 x 100 x 40mm
Weight	720g
Operating temperature	-10°C to +50°C

Design, features & performance subject to change.
(*)Full 20MHz bandwidth available for receive center frequency of at least 10.5MHz.



AOR, LTD.
2-6-4 Misuji, Taito-ku, Tokyo 111-0055, Japan
Tel: +81-3-3865-1695 Fax: +81-3-3865-1697
www.aorja.com