DUAL-CHANNEL DIGITAL RECEIVER



Dual-channel digital receiver

Areas of Application

The receiver is designed for digitization and preliminary data processing of wideband analog signals with a high dynamic range in radars, communications, image processing, and in various scientific applications, particularly, in radio telescopes



Number of ADC channels	2
Time marker input	1
External/internal clock, MHz	≤ 160
Input signal bandwidth, MHz	180
ADC resolution, bit	16
Data interface	10 Gbit and
	1 Gbit Ethernet
Dimensions, mm	$220\times150\times22$
Weight, g	270
Power consumption, W	25
Operating temperature	
range, °C	0+70

Stage of Development. Suggestions for Commercialization

IRL8, TRL7 Manufacture, delivery, warranty service, and staff training, upon request



DSP board



Receiver integration with the host PC

Advantages

Both standalone and built-in configurations are available; the device enables autocorrelation and cross-correlation real-time processing of wideband signals with a bandwidth up to 80 MHz; fast receiver mode reprogramming; data synchronization with high precision time sources (like GPS and others); synchronous operation of several receivers in multichannel systems; фтв raw data saving at a speed up to 640 MB/s

IPR Protection

IPR1

Contact Information

Dmytro M. Vavriv, Institute of Radio Astronomy of the NAS of Ukraine; +38 057 720 37 18, e-mail: vavriv@rian.kharkov.ua