

WLE3350A 2.1GHz 6-channel FSK Receiver

- Single, main down converter stage
- Independent channel programming
- 12VDC power supply for coax. antenna amplifier
- SAW channel high selection stages



The WLE3350A is a six channel FSK-receiver to receive typically RF-signals coming from a WLE2350A transmitter. The first amplification and down conversion is done by a common stage, with excellent large signal performance and image signal suppression. After the first down conversion, filtering, and amplification, the signal is split into six streams to feed all six demodulation stages. Each channel is programmed individually to a dedicated frequency and so the receiver offers a very flexible usage. Due to the common input stage, the system is running with one receive antenna, reducing the installation infrastructure to its minimum.

The channel setting and control signals are in the standard configuration accessible on the receiver's rack rear panel. The received and digitized data is in conjunction with the recovered receiver clock available on each demodulator module. The standard data and clock interface is RS-422, different interface specifications are available upon request.

Each demodulator stage has for the final channel selection a high performance SAW filtering and AGC-stage to operate the FSK-demodulator always in the limiting range. This guarantees best BER-performance in multi-path and other difficult propagation environments.

With the modular receivers' structure, a change of the common frequency band is realized with the replacement of the common, first down converter module. This allows also easy and slim customization of the system for special and very dedicated applications. The implementation of more or less than six parallel receive channels can be realized with no or little changes, depending also of the requested minimum system performance.

The receiver structure is laid out for horizontal mounting with convection cooling; deviating mounting methods require an external, forced cooling system.

Item		Value	Unit	
Technical specifications	Receiver frequency		2025 to 2105 MHz	
	Input sensitivity	min.	-85 dBm	
	Input power without damage	max.	-20 dBm	
	Channels	selection on rear panel	18	
	Channel spacing	typ.	4.167	MHz
	DC Voltage	18 to 36	nom. 24	VDC
	Current consumption	typ.	1.8	A@24VDC
	Data interface	RS-422 TTL	symmetric or asymmetric	
	Antenna connector		SMA on front panel	
	Temperature range	operational	-0..+50	°C
		storage	-40..+85	°C
	Humidity	non-condensing	90	%
	Color		polished stainless steel	
	Dimensions	approx.	300x120x180	mm
	Weight	approx.	2.5	kg
Mounting		on rear panel		

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