

WLE2350A 2.1GHz FSK 1W Transmitter

- RF spectrum optimized design
- Data rate DC to 2MBit/s
- Application specific modulation signal settings
- SMA coaxial antenna interface
- 2.1 GHz frequency band in standard version



The transmitter WLE2350A is a one watt digital FSK-transmitter combined with a synthesizer locked up-converting stage, based on the internal TCXO frequency reference. The integrated oscillator core is a low phase noise design and the modulator section is completely in digital technology. This allows to control the signal conditioning settings with no or minimum interaction between each other. For optimum RF spectrum efficiency, the transition between the two discrete FSK-frequencies is controllable over multiple parameter settings.

In the standard configuration, the TX-data interface is RS-422 compatible, unbalanced TTL signals can be used as option. For using a synchronized encoder, the system clock can be generated by the transmitter, e.g. at a clock rate of 1.92MChip/s.

With the modular structure, the different functional blocks can be replaced or upgraded with application specific sections, e.g. to change the output power, the transmit frequency band, the TX-data interface and others.

With the use of a self-contained cooling system, the transmitter can be mounted in any direction without the risk of overheating the transmit section. The front panel indications allow the verification of the correct power supply operation, the channel setting and the locked condition of the up-converting synthesizer.

Item		Value	Unit	
Technical specifications	Transmitting frequency		2025 to 2105 MHz	
	Output power	min.	+29 dBm	
	Channels	selection on front panel	18	
	Channel spacing	typ.	4.167 MHz	
	DC Voltage	18 to 36	nom. 24 VDC	
	Current consumption	typ.	1 A	
	Data interface	RS-422 TTL	symmetric or asymmetric	
	Antenna connector		SMA on front	
	Temperature range	usage	-20..+50	°C
		storage	-40..+85	°C
	Humidity	non-condensing	90	%
	Color		grey and blue	
	Dimensions	approx.	107x125x175	mm
	Weight	approx.	0.60	kg
	Mounting		on rear panel	

