(800) 475-5852





#### Wirelessly transmit and/or receive radio signals.

# AWR ERM 100

The AWR-ERM100 is an embedded radio module, which is a small electronic device used to wirelessly transmit and/or receive radio signals from a PC or an embedded wireless device. That can be commonly used in Call Boxes, Nurse Call Radios, Alarm System Radios, or Public Adress Interfaces.

#### **Key Features:**

- RF power output .5 / 2 Watts
- RF Channels: 16 Independent TX/RX frequencies
- Frequency: 450-470 MHz (UHF Band)
- Frequency Stability: +/- 2.5 ppm
- Tone/Code Signaling: CTCSS & DCS
- · Audio Companding Tx & Rx: Software configurable per channel
- · Remote channel steering
- · Input for POCSAG paging

	i.	
Housing Color	Black	
Height	1.25"	
Width	3.13"	
Length	5.7"	
Weight	7.43 oz	
Antenna	Detachable	
Audio Accessory Jack	20 Pin Rectangular	
Power Requirement	12V, 2 amp	
Power Input	12V DC	
Transmitter Power	2 Watts	
Channels	16	
FCC ID	Q9SAWRERM100	
IC	4651A-ERM100	

Operating Frequency Range	450 - 470 MHz
Frequency Separation	12.5 KHz
Tone / Code Signaling	CTCSS / DCS
Transmit Time-out Timer	30 to 300 seconds or Off
RF Connector	BNC FM
DC Power Connector	2.1 mm
Antenna Impedance	50 Ohm
RF Output @Antenna Port	2 Watts
Frequency Stability	2.5 ppm
Modulation	11K0F3E
Deviation	+/- 2.5K
Spurious & Harmonics	≤-36 dBm
Audio Response	300 - 3000 Hz

FM Noise	≥45 dB	
Duty Cycle	50 / 50	
Audio Power Output	500 mW	
Sensitivity (12 dB SINAD)	.3 μV	
Selectivity (EIA)	60 dB	
Image Rejection (EIA)	80	
Intermodulation Rejection (EIA)	65 db	
Frequency Stability	+/- 2.5ppm	
Noise Squelch Sensitivity	.25 μV	
Audio Frequency	300-3000 Hz	

### **Specifications:**

## **Pin Number Chart**

Pin Number	Function
1	Most significant channel select (CS3)
2	Channel select (CS2)
3	Channel select (CS1)
4	Least significant channel select bit (CS0)
5	+12 VDC input (No protection or fuse)
6	Carrier detect output, COR
7	Auxiliary input - wideband input for POCSAG input
8	Auxiliary output
9	WB input enable (When externally pulled low)
10	Microphone input
11 - 14	NC*
15	Ground
16	PTT (pull to ground to transmit)
17	TX Data
18	Rx Data
19	Speaker Output N
20	Speaker Output P

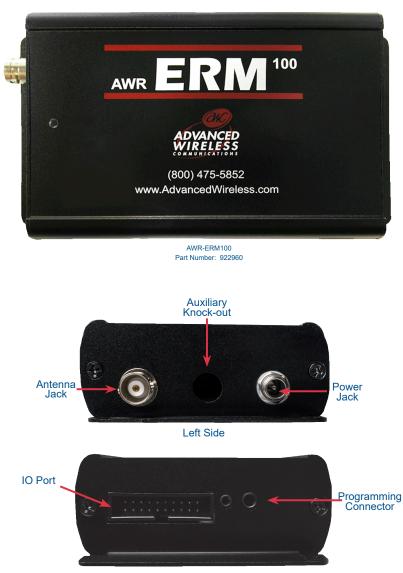
Note: Incorrect connections or usage may cause damage to the radio or to the circuitry connected to it.

\* Do not connect to the NC pins.

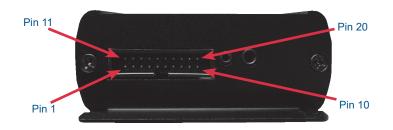
**Accessories:** 

Cable ERM Universal Wire

Harness 922974



Right Side



## Additional information available at: www.advancedwireless.com



(800) 475-5852 20809 Kensington Blvd, Lakeville, MN 55044 www.advancedwireless.com f ♥ in □

Power Supply

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