

# SHURE®

LEGENDARY  
PERFORMANCE™

PSM® Personal Monitor Systems

PSM 300 | PSM 900 | PSM 1000

# PSM®1000 PERSONAL MONITOR SYSTEM



**The PSM1000 Personal Monitor System from Shure brings personal monitoring to its most advanced level yet.**

The full-rack, dual-channel, networkable transmitter is ideally suited for the demands of professional touring and installation applications, and the diversity bodypack receiver delivers pristine RF signal and audio quality. Networkability over Ethernet connection enables remote control of transmitter functions and comprehensive frequency coordination via Wireless Workbench® software.

## APPLICATIONS

Touring Sound  
House Of Worship  
Broadcast  
Theater

## PRODUCT HIGHLIGHTS

Touring-Grade Features and Design  
Robust RF Performance and Networked control  
Advanced Lithium-Ion Rechargeability

# PSM<sup>®</sup>1000 System Specifications

RF Carrier Range	470–952 MHz (regionally dependent)
Compatible Frequencies	49 per band
Tuning Bandwidth	72 MHz – 80 MHz (regionally dependent)
Operating Range (environment dependent)	90m (300ft)
Audio Frequency Response	35Hz – 15kHz
Stereo Separation	60 dB
Signal-To-Noise Ratio (A-Weighted)	90 dB (typical)
Total Harmonic Distortion (ref. ±34 kHz deviation @1 kHz)	<0.5% (typical)
Comping	Patented Shure Audio Reference Comping
Spurious Rejection (ref. 12 dB SINAD)	>80 dB (typical)
Frequency Stability	±2.5 ppm
MPX Pilot Tone	19 kHz (±0.3 kHz)
Modulation	FM, MPX Stereo (±34 kHz deviation, nominal)
Operating Temperature	-18 to +57 °C

## Frequency Range

Band	Range	Country	RF Output Power***
G10	470-542 MHz	US, IA	10 / 50 / 100 mW
G10E	470-542 MHz	UK, EU, Peru	10 / 50 mW
H8Z	518-582 MHz	NZ, Korea	10 / 50 mW
J8	554-626 MHz	US, IA	10 / 50 / 100 mW
J8E	554-626 MHz	EMEA	10 / 50 mW
K10E	596-668 MHz	UK, EU, Australia	10 / 50 mW
L8	626-698 MHz	US, IA, Australia	10 / 50 / 100 mW
L8E	626-698 MHz	EMEA	10 / 50 mW
L9E	670-742 MHz	China	10 / 50 mW
L10	670-742 MHz	Hong Kong	10 / 20 mW
P8	710-790 MHz	EU	10 / 50 mW
Q21	710-787 MHz	China	10 / 50 mW
Q22E	750-822 MHz	EU	10 / 50 mW
Q23	750-806 MHz	Taiwan	6 / 10 mW
R27	794-806 MHz	Thailand, EMEA	10 / 50 mW
A24	779-788 MHz 797-806 MHz	Japan	6 / 10 mW
X1	944-952 MHz	US	10 / 50 / 100 mW

### NOTE:

This Radio equipment is intended for use in musical professional entertainment and similar applications. This Radio apparatus may be capable of operating on some frequencies not authorized in your region. Please contact your national authority to obtain information on authorized frequencies and RF power levels for wireless microphone products.

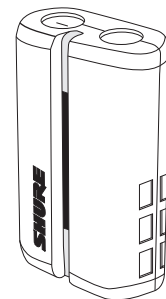
## Furnished Accessories

P10R Antenna	
UA700	470–542 MHz
UA710	540–626 MHz
UA720	596–692 MHz
UA730	692–830 MHz
UA740	830–952 MHz
P10T Antenna	
UA820G10	470–542 MHz
UA820H8	518–582 MHz
UA820J8	554–626 MHz
UA820K1	596–668 MHz
UA820L8	626–698 MHz
UA820LCH	670–742 MHz
UA820P8	710–790 MHz
UA820Q2	750–822 MHz
UA820X	944–952 MHz
95A9023	Front Mount Antenna Cable
95A2313	Zipper Bag
53B8443	Link Bar
90AR8100	Hardware Kit (Rackmounting Screws)
90B8977	Bumper Kit

## Antennas, Combiners and Accessories

PA821SWB	8-to-1 antenna combiner for better RF performance
PA421SWB	4-to-1 antenna combiner with power distribution to 4 transmitters (better RF performance and eliminates need for external power supply)
PA805SWB	Passive Directional Antenna
PA301	Protective Cover for P9RA and P10R body pack receivers
HA-8089	Helical Antenna (470-900 MHz)
HA-8241	Helical Antenna (944-952 MHz)
UA860SWB	Passive Omnidirectional Antenna
UA802	Coaxial Cable, BNC-BNC, RG58C/U type, 50 Ohm, 2 ft length (0.6 m)
UA806	Coaxial Cable, BNC-BNC, RG58C/U type, 50 Ohm, 6 ft length (2 m)
UA825	Coaxial Cable, BNC-BNC, RG8X/U type, 50 Ohm, 25 ft length (7.5 m)
UA850	Coaxial Cable, BNC-BNC, RG8X/U type, 50 Ohm, 50 ft length (15 m)
UA8100	Coaxial Cable, BNC-BNC, RG8X/U type, 50 Ohm, 100 ft length (30 m)

## Rechargeable Power Management



### SB900 Rechargeable Battery

The P10R bodypack is compatible with the SB900 lithium-ion rechargeable battery, which provides extended usage time of up to 10 hours and precise tracking of remaining life and charge cycle details.

### SBC800 Recharging Station

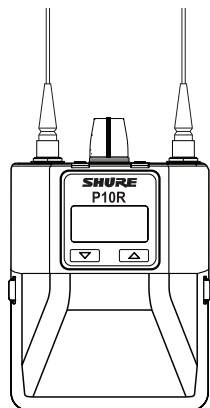
This compact and portable unit charges up to 8 SB900 batteries to full capacity within 3 hours, with status LEDs to indicate power levels. SB900 batteries fit securely in the charger for easy, efficient storage and transport.

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# Component Specifications

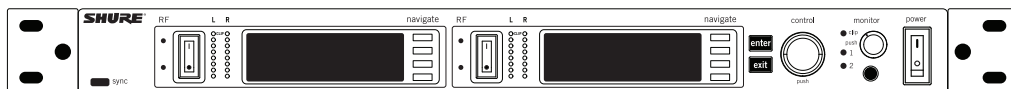
## P10R Wireless Bodypack Receiver



The P10R is a low profile, diversity bodypack receiver for use with the PSM®1000 Wireless Personal Monitor System. It offers premium features like full bandwidth RF scan and Automatic RF Gain Control for unparalleled signal stability and channel availability, all packed in the slimmest form factor available. Patent-pending CueMode allows monitoring of different stage mixes and storing of up to 20 separate channels from one bodypack for quick and easy mix reference. Optional advanced rechargeability eliminates the need for disposable batteries and provides extended usage times with reliable battery life, cycle count, and health metering.

Tri-band RF Filtering	-3 dB point 30.5 MHz from the center frequency of each band
Active RF Gain Control	31 dB (adjusts RF sensitivity to provide more RF dynamic range)
RF Sensitivity (20 dB SINAD)	2.2 $\mu$ V
Squelch Threshold ( $\pm$ 3 dB SINAD)	22 dB SINAD
Adjacent Channel Rejection	>70 dB
Intermodulation Attenuation	>70 dB
Blocking	>80 dB
Image Rejection	>90 dB
Audio Output Power (1kHz @ <1% distortion, peak power, @32 $\Omega$ )	100 mW per output
Minimum Load Impedance	9.5 $\Omega$
High Boost	Selectable: +2 dB, +4 dB @ 10 kHz
Volume Limiter	Selectable: 3-9 Limits volume adjustment knob. Selected value analogous to volume knob increment.
Battery Life	4-6 hours (continuous use)
Net Weight	186 g with batteries
Dimensions	99mm x 66mm x 23mm

## P10T Dual Wireless Transmitter



The P10T is a networkable, full-rack, dual channel wireless transmitter used in conjunction with the P10R Bodypack receiver as part of the PSM®1000 Wireless Personal Monitor System. It offers a 72 MHz wide tuning bandwidth, networked remote control via Wireless Workbench software, advanced rechargeability options, and PSM 900 backwards compatibility. Connections include balanced ¼" and XLR, loop out, dual Ethernet ports, and headphone monitor out. Comes with front or back mountable antennas, and power and Ethernet jumper cables.

RF Output Power	selectable: 10, 50, 100 mW (regionally dependent)
RF Output Impedance	50 $\Omega$ (typical)
Net Weight	4.7 Kg (10.4 lb)
Dimensions	483 mm X 343 mm X 44 mm
Power Requirement (RF on, 100 mW power mode, no audio)	Input: 100-240V AC, 50/60 Hz, 0.5A max (5.5 max outlet loaded) Output: 100-240V AC, 5A max, unswitched
<b>Audio Input</b>	
Connector Type	Combination XLR and 6.35 mm (1/4") TRS
Polarity	XLR: Non-inverting (pin 2 positive with respect to pin 3) 6.35 mm (1/4") TRS: Tip positive with respect to ring
Configuration	Electronically balanced
Impedance	70.2 k $\Omega$ (actual)
Nominal Input Level	switchable: +4 dBu, -10 dBV
Maximum Input Level	+4 dBu: +29.2 dBu -10 dBV: +12.2 dBu
Pin Assignments	XLR: 1=ground, 2=hot, 3=cold 6.35 mm (1/4") TRS: Tip=hot, Ring=cold, Sleeve=ground
Phantom Power Protection	up to 60 V DC
<b>Audio Output</b>	
Connector Type	6.35 mm (1/4") TRS
Configuration	Electronically balanced
Impedance	Connected directly to inputs

