

# SHURE®

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GLX-D® Advanced Digital Wireless

# GLX-D® ADVANCED DIGITAL WIRELESS



## Rock-solid RF performance for multiple system installations

Groundbreaking GLX-D® Advanced Digital Wireless systems enable exceptional digital audio clarity, intelligent rechargeability and seamless operation—available in rack mount receiver system configurations for use with GLX-D Advanced Frequency Managers and accessories for small-to-medium installations.

### PRODUCT HIGHLIGHTS

**Automatic Frequency Management**

**2.4 GHz frequency band**

**Operate up to 9 compatible systems in typical setting, up to 11 maximum under ideal conditions**

**Legendary Shure audio quality and rugged construction**

# System Specifications

Compatibility	Operate up to 9 compatible systems in typical setting, up to 11 maximum under ideal conditions	
System Operating Range	Indoors: Up to 100 feet (30 m) typical, with a maximum of 200 feet (60 m) under ideal conditions	
	Outdoors: Up to 65 feet (20 m) typical, with a maximum of 165 feet (50 m) under ideal conditions	
Transmit Mode	Shure Proprietary Digital	
Audio Frequency Response	20 Hz – 20 kHz Note: Dependent on microphone type	
Dynamic Range	120 dB, A-weighted	
Latency	Groups 1 and A:	Groups 2, 3, 4 and B:
	4.0 ms	7.3 ms
RF Sensitivity	-88 dBm, typical	
Total Harmonic Distortion	0.2%, typical	
RF Output Power	10 mW E.I.R.P. max	
Operating Temperature Range	-18°C (0°F) to 57°C (135°F) Note: Battery characteristics may limit this range.	
Storage Temperature Range	-29°C (-20°F) to 74°C (165°F)	
Polarity	Positive pressure on microphone diaphragm (or positive voltage applied to tip of WA302 phone plug) produces positive voltage on pin 2 (with respect to pin 3 of low-impedance output) and the tip of the high impedance 1/4-inch output.	
Battery Life	Up to 16 hours	
	NOTE: All Specifications are subject to change. Performance may vary depending on country regulations and operating environment.	

## Optional Accessories and Replacement Parts

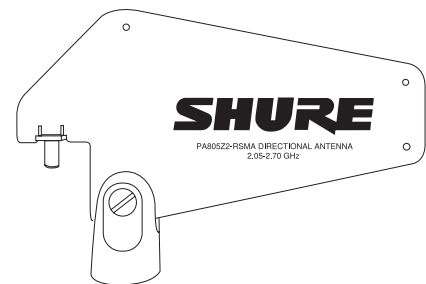
<b>PA805Z2-RSMA</b>	Passive Directional Antenna 2.4 GHz	<b>PS60</b>	Power Supply (UA846Z2)	<b>UA802-RSMA</b>	0.6 m (2 ft.) Reverse SMA Cable
<b>UA8-2.4GHZ</b>	1/2 Wave Antenna, 45 deg. (2.4 GHz)	<b>PS43</b>	Power Supply (GLXD4R)	<b>UA806-RSMA</b>	1.8 m (6 ft.) Reverse SMA Cable
<b>UA505-RSMA</b>	Wall Mount for PA805-RSMA or UA8-2.4 GHz	<b>SB902</b>	Lithium Ion Rechargeable Battery	<b>UA825-RSMA</b>	7.6 m (25 ft.) Reverse SMA Cable
<b>UA221-RSMA</b>	Reverse SMA Passive Antenna Splitter	<b>SBC10-USB</b>	Micro-USB Battery Charger	<b>UA850-RSMA</b>	15.2 m (50 ft.) Reverse SMA Cable
<b>95A32436</b>	Reverse SMA Bulkhead Adapters	<b>SBC10-902</b>	Standalone Single Battery Charger	<b>UA8100-RSMA</b>	30.4 m (100 ft.) Reverse SMA Cable
		<b>SBC-CAR</b>	Car Battery Charger		

# Component Specifications

## GLX-D Advanced Passive Directional Antenna (PA805Z2-RSMA)

The GLX-D Advanced Passive Directional Antenna (PA805Z2-RSMA) is considered a key part of any GLX-D Advanced Digital Wireless installation. These antennas both improve reception of GLX-D transmitter signals and minimize interference from any 2.4GHz sources near receivers with appropriate installed placement.

Frequency Range	2050 to 2700 MHz
<math>\leq 2:1</math> Voltage Standing Wave Ratio (VSWR)	
Antenna Gain	8 dBi
@ 2.45 GHz, typical	
3 dB Horizontal Beam Width	100 degrees
Efficiency	89%
@ 2.45 GHz, typical	
Impedance	50 $\Omega$
Polarization	Linear
Front-to-back ratio	24 dB
@ 2.45 GHz, typical	
Connector Type	Reverse SMA
Dimensions	105 x 164 x 27.5 mm (4.1 x 6.5 x 1.1 in.) H x W x D
Net Weight	2.5 oz. (70 g)



GLX-D Advanced Passive Directional Antenna (PA805Z2-RSMA)

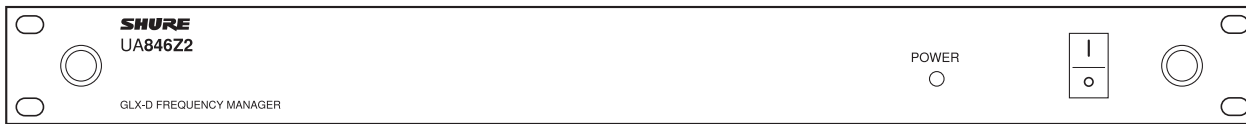
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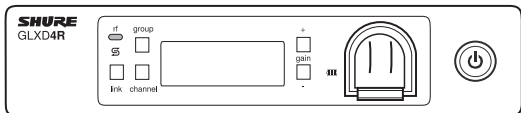
# Component Specifications *(continued)*



## GLX-D Advanced Frequency Manager (UA846Z2)

Power Requirements	15 VDC
DC Output	15 VDC (×6)
Output Current	3.8 A, maximum
<i>Combined total from all DC outputs</i>	
Operating Temperature Range	-18 °C to 63 °C (0 °F to 145 °F)
Dimensions	45 × 483 × 192 mm (1.8 × 19 × 7.6 in) H × W × D
Net Weight	1.63 kg (3.6 lbs)

RF Input		RF Output	
Connector Type	Reverse SMA	Connector Type	Reverse SMA
RF Frequency Range	2400 to 2483.5 MHz	RF Frequency Range	2400 to 2483.5 MHz
Receiver Port Isolation	35 dB, typical	Output Intercept Point (OIP3)	48 dBm, typical
Impedance	50 Ω	Impedance	50 Ω
Maximum Antenna Input Power	-10 dBm	Reverse Isolation Output to Input	35 dB, typical
Maximum Receiver Port Input Power	+15 dBm	Gain Input to any output port	-3 to 0 dB



## GLXD4R Rack Mount Receiver

Dimensions	42 × 197 × 163 mm (1.7 × 7.8 × 6.4 in.) H × W × D
Weight	907.2 g (32 oz.) without batteries
Housing	Steel
Power Requirements	14 to 18 VDC (tip positive with respect to ring), 550 mA
Spurious Rejection	>35 dB, typical
Gain Adjustment Range	-18 to 42 dB in 1 dB steps
Phantom Power Protection	Yes

Audio Output		
Configuration	XLR Output	Balanced
	6.35 mm (1/4") output	Impedance balanced
Impedance	XLR Output	100 Ω
	6.35 mm (1/4") output	100 Ω (50 Ω, Unbalanced)
Full-Scale Output	XLR	LINE setting= +18 dBV, MIC setting= -12 dBV
	6.35 mm (1/4")	+12 dBV
Pin Assignments	XLR Output	1=ground, 2=hot, 3=cold
	6.35 mm (1/4") connector	Tip=audio, Ring=no audio, Sleeve=ground
Mic/Line Switch	30 dB Pad	

Receiver Antenna Input	
Impedance	50 Ω
Antenna Type	½ Wave Sleeve Dipole
Maximum Input Level	-20 dBm

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# Component Specifications *(continued)*

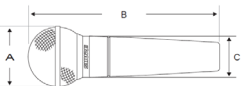
## GLXD1 Bodypack Transmitter

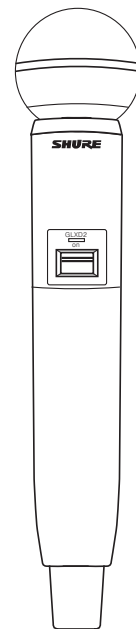
Dimensions	90.4 x 64.5 x 22.9 mm (3.56 x 2.54 x 0.90 in.), H x W x D (without antenna)
Power Requirements	3.7 V Rechargeable Li-Ion
Housing	Cast Metal, Black Powdercoat
Input Impedance	900 k $\Omega$
RF Output Power	10 mW E.I.R.P. max
<b>Transmitter Input</b>	
Connector	4-Pin male mini connector (TA4M)
Configuration	Unbalanced
Maximum Input Level (1 kHz at 1% THD)	-8.4 dBV (7.5 Vp-p)
Antenna Type	Internal Monopole
Pin Assignments TA4M	1: Ground (cable shield) 2: + 5 V Bias 3: Audio 4: Tied through active load to ground (On instrument adapter cable, pin 4 floats)



GLXD1 Bodypack Transmitter

## GLXD2 Handheld Transmitter

Dimensions	
	
<b>Model</b>	<b>A</b> <b>B</b> <b>C</b>
SM58	51 mm, 2.0 in.      252 mm, 9.9 in.      37 mm, 1.5 in.
BETA 58	51 mm, 2.0 in.      252 mm, 9.9 in.      37 mm, 1.5 in.
SM86	49 mm, 1.9 in.      252 mm, 9.9 in.      37 mm, 1.5 in.
BETA87A	51 mm, 2.0 in.      252 mm, 9.9 in.      37 mm, 1.5 in.
<b>Weight</b>	
SM58	267 g (9.4 oz.) without batteries
BETA 58	221 g (7.8 oz.) without batteries
SM86	275 g (9.1 oz.) without batteries
BETA87A	264 g (9.3 oz.) without batteries
<b>Housing</b>	
Housing	Molded Plastic
Power Requirements	3.7 V Rechargeable Li-Ion
RF Output Power	10 mW E.I.R.P. max
Maximum Input Level	145 dB SPL



GLXD2 Handheld Transmitter

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