

UR-D1 | UHF SINGLE-CHANNEL DIVERSITY DIGITAL WIRELESS MICROPHONE SYSTEM



Description

The UR-D1 is Relacart's latest fully self-developed digital architecture wireless microphone system. Combining powerful functionality with operational flexibility, it features a 64MHz (region-dependent) operating bandwidth and low intermodulation distortion, enabling 20 simultaneously active transmitters within an 8MHz bandwidth and supporting over 60 compatible channels in a single frequency band. This ensures stable wireless transmission even in crowded RF environments. With 24-bit/48kHz digital audio quality, the system accurately reproduces sonic details beyond the capabilities of analog systems. A total system latency of <3ms and a flat frequency response across 20Hz–20kHz ensure precise vocal reproduction—from deep resonances to high-frequency nuances—delivering transparent, high-fidelity sound. A dynamic range exceeding 120dB provides exceptional signal-to-noise performance. Designed for easy installation and integration, scaling from small conference rooms or classrooms to large campus and enterprise installations. Advanced features enable detailed configuration management while simplifying complex channel and audio setups. Additionally, the WireMicX Wireless management system supports remote system maintenance, monitoring, and control for streamlined operation.

Product Specification

Chassis Specification:	1U Half-Rack
Reception Method:	Diversity Single-Channel Reception
Frequency Stability:	±0.005%
Carrier Frequency Range:	470MHz–936MHz
Operating Range:	100 meters (open area)
Sampling Rate:	24-bit/48kHz
Frequency Response:	20Hz–20kHz ±1dB
Modulation Method:	Relacart Patented Digital Technology
Bandwidth:	64MHz (region-dependent)
Overall S/N Ratio:	>110dB
Total Harmonic Distortion (T.H.D.):	<0.1% @1kHz
RF Tuning Step:	25kHz
Image Rejection:	>70dB (typical)
RF Sensitivity:	-98 dBm @ 10 BER
Latency:	<3ms
Audio Dynamic Range (A-weighted, typical, system gain @ +10):	>120dB
Total Harmonic Distortion (-12dBFS input, system gain @ +10):	<0.1%
Operating Temperature Range:	-10°C to 50°C
Storage Temperature Range:	-20°C to 70°C
Power Supply:	DC 12V/1A
Antenna Interface:	Dual BNC, Supports +12V/150mA Output
Audio Output Interfaces:	6.3mm Unbalanced Audio Output, XLR Balanced Audio Output
Dimensions (mm):	205 (L) × 206 (W) × 43 (H)
Weight(Approx):	1kg