

ULTRASONIC POWER METER

UM-DBS-200S



User Manual V4.0

Content

- 1) 1 x Storage Case
- 2) 1 x Power Meter (Battery included)
- 3) 1 x Probe
- 4) 1 x Charging Cable
- 5) 1 x Adaptor
- 6) 1 x User Manual



Specifications

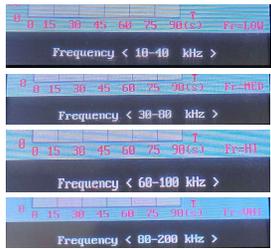
Model	UM-DBS-200S	UM-DBS-1000
Measuring Span	0 - 255 w/in ²	
Measuring Frequency	10kHz - 200kHz	10kHz – 1 MHz
Data Display	Color screen, Time and Energy curve, maximum and average minimum, record files	
Data Storage	Time, Instant Energy, Continuous record 48 hours, 360k point data (0.5 seconds/point)	
Power Supply	1x Rechargeable battery 3.7V	
Probe Operating Temperature	0 - 150 °C	
Probe Material	Stainless Steel 316	
Probe Diameter	25 mm	
Probe Length	1.0 m; 0.5m Cable, 0.5m Probe with Handle	
Frequency Display	Yes	
Meter Dimension (L x W x H)	200 x 100 x 32 mm	
Storage Box Dimensions (L x W x H)	584 x 224 x 90 mm	
Weight	3.3 kg	

Features

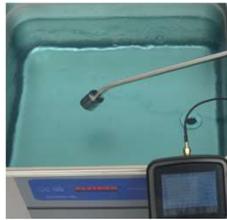
- Designed as an easy-to-use, portable Ultrasonic Power Meter
- Measures the frequency, instantaneous and average power ultrasonic power intensity over time with graphical display
- Serves as a Reference Instrument for monitoring performance of an ultrasonic cleaning tank to help increase operation and performance reliability

Useful for understanding of (not limited to):

- the consistency of power in the cleaning tank for cleaning process over time
- energy variations and distribution with different cleaning liquids and temperature within the ultrasonic cleaning tank
- data sets to determine ageing transducers in the cleaning system



Frequency Display	LOW	MED	HI	VHI
Frequency (kHz)	10-40	30-80	60-100	80-200



Operation

1. Press “**Power On/Off**” Button  to power on. Press it again to power off the device.
2. Once the ultrasonic activity is detected, it will automatically start measuring. The screen will display the ultrasonic power intensity **E (W/inch²)** and the working frequency **F (kHz)**.

Meanwhile, **time, power, frequency, maximum power, and average power** will be recorded into a file, each file can record up to 180 points (0.5 second/point).

This meter can record up to 100 files with 18K point data.

To check the recorded data, press “**Waveform Playback**” Button . Toggle the “**Up/Down**” Button  to select the file you require.

To measure the frequency, press “**Menu**” Button  to select the range of working frequency. Press the “**Menu**” button again to return to the Main Interface.

To change the Power Saving & Calendar settings, press & hold the “**Menu**” Button for 3 seconds. Press again the “**Menu**” Button to cycle through the timer and calendar selection.

Press the “**Up/Down**” Button  to change the value. Press the “**Waveform Playback**” Button  to return to the Main Interface.

1. When the meter is powered on and no ultrasonic activity is detected, it will automatically turn off after the set power-off timer expires.
2. When the battery is low in power, please charge immediately (charging voltage is 5V). If the battery is too low, you will not be able to power it on. Charge first before usage.
3. To clear all the recorded files, press & hold “**Waveform Playback**” Button  for file selection, press & hold both “**Up/Down**” button  **at the same time** for the display to prompt “Delete All Data?”. To confirm, hold until it shows “All data deleted!”. This will clear all files and the file will show ‘0’. To abort clearing of files, release the buttons within 3 seconds.

Technical Specifications subject to tolerances due to manufacturing.

Control Buttons

