



# Sound Metrics Corp.

Using sound to make sound measurements

## SPECS for DIDSON Standard and Long Range units

### DIDSON-S (Standard DIDSON)

#### Detection Mode

Operating Frequency	1.1 MHz
Beamwidth (two-way)	0.5° H by 14° V
Number of beams	48
Range settings	
window start	0.84 m to 26.04 m in 0.84-m intervals
window length	5 m, 10 m, 20 m, 40 m
range bin size relative to window length	10 mm, 20 mm, 40 mm, 80 mm
pulse length relative to window length	18 µs, 36 µs, 72 µs, 144 µs

#### Identification Mode

Operating Frequency	1.8 MHz
Beamwidth (two-way)	0.3° H by 14° V
Number of beams	96
Range settings	
start range	0.42 m to 13.02 m in 0.42-m steps
window length	1.25 m, 2.5 m, 5 m, 10 m
range bin size relative to window length	2.5 mm, 5 mm, 10 mm, 20 mm
pulse length relative to window length	4.5 µs, 9 µs, 18 µs, 36 µs

#### Both Modes

Max frame rate (window length dependent)	4-21 frames/s
Field-of-view	29°
Remote Focus	1 m to max range
Power Consumption	30 Watts typical
Weight in Air	7.5 kg (16.5 lb)
Weight in Sea Water	0.7 kg neg. (1.5 lb)
Dimensions	30.7 cm by 20.6 cm by 17.1 cm
Depth rating	300 m (1000 feet)
Control	Ethernet
Display Up-Link	Ethernet and NTSC Video
Maximum cable length (100BaseT option)	61 m (200 feet)
Maximum cable length (Patton option)	150 m (500 feet) with topside power
Maximum cable length (Patton option)	1220 m (4000 feet) with local power
Topside Requirements	Windows (2000, XP, Vista) Ethernet card, Video monitor (optional)

## DIDSON-LR (Long Range DIDSON)

### Detection Mode

Operating Frequency	0.700 MHz
Beamwidth (two-way)	0.8° H by 14° V
Number of beams	48
Range settings	
window start	0.83 m to 25.8 m in 0.83-m intervals
window length	10 m, 20 m, 40 m, 80 m
range bin size relative to window length	19 mm, 39 mm, 78 mm, 156 mm
pulse length relative to window length	23 µs, 46 µs, 92 µs, 184 µs

### Identification Mode

Operating Frequency	1.2 MHz
Beamwidth (two-way)	0.5° H by 14° V
Number of beams	48
Range settings	
start range	0.42 m to 12.92 m in 0.42-m steps
window length	2.5 m, 5 m, 10 m, 20 m
range bin size relative to window length:	5 mm, 10 mm, 19 mm, 39 mm
pulse length relative to window length:	7 µs, 13 µs, 27 µs, 54 µs

### Both Modes

Max frame rate (window length dependent)	2-10 frames/s
Field-of-view	29°
Remote Focus	1 m to max range
Power Consumption	30 Watts typical
Weight in Air (DC option)	7.5 kg (16.5 lb)
Weight in Sea Water (DC option)	0.7 kg neg. (1.5 lb)
Dimensions	30.7 cm by 20.6 cm by 17.1 cm
Depth rating	300 m (1000 feet)
Control	Ethernet
Display Up-Link	Ethernet and NTSC Video
Maximum cable length (100BaseT option)	61 m (200 feet)
Maximum cable length (Patton option)	150 m (500 feet) with topside power
Maximum cable length (Patton option)	1220 m (4000 feet) with local power
Topside Requirements	Windows (2000, XP, Vista) Ethernet card, Video monitor (optional)