## Specification Sheet of Hydrophone

## Pipe-type Hydrophone

Acoustic measurement pipe with a built-in pre-amplifier (Length = 50cm)

Outside diameter: 48.6mm, (thickness = 3mm)

Quality of material: SUS304 Length of measurement: 50cm

Resonance frequency: around 4.5kHz

Unidirectional electret condenser microphone

- Impedance:  $600 \Omega \pm 30\%$  (1 k Hz) - Sensitivity:  $65.5 dB \pm 4 dB$  (1 k Hz)

- Pre-amplifier gain with a filter: x20

- Cable length: 20m

(with a waterproof connector)



Fig1. Pipe-type Hydrophone

## Plate-type Hydrophone

Acoustic measurement plate with a built-in hydrophone-unit

Plate size:  $50 \times 20 \text{cm}$  (thickness = 12 mm)

Quality of material: SUS304 Outer size: 544 × 274 × 100mm

Weight: 25kg

Unidirectional electret condenser microphone

- Impedance:  $600\,\Omega\pm30\%$  (1 k Hz) - Sensitivity  $65.5\text{dB}\pm4\text{dB}$  (1 k Hz) - Pre-amplifier gain with a filter: x20

- Cable length: 20m

(with a waterproof connector)



Fig2. Plate-type Hydrophone

Acoustic to running sand quantity converter (HT-HP5)

Bandpass filter 4.5kHz First degree amplifier x10

Output Pulse: 10ch

Analog: 4ch

Power source DC12V

Consumption current 40 mA (Average) Electric supply to pre-amplifier  $\pm 5 \text{V}$ 



Fig3. Converter