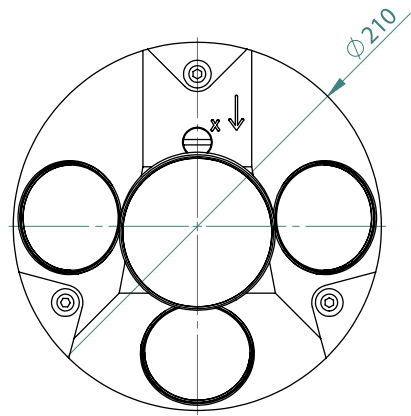
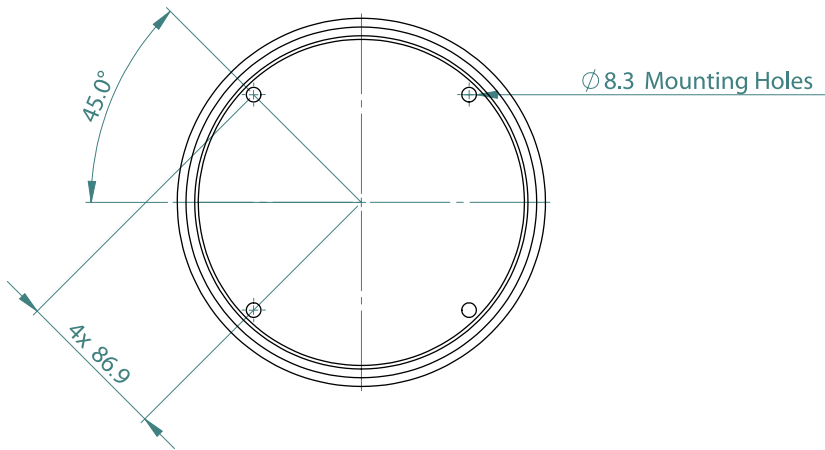
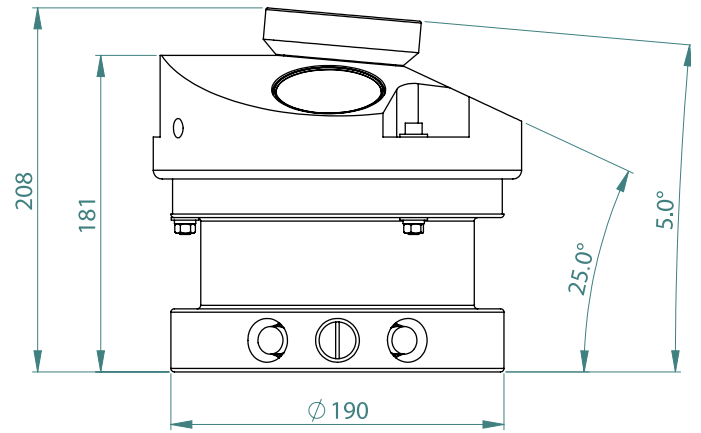
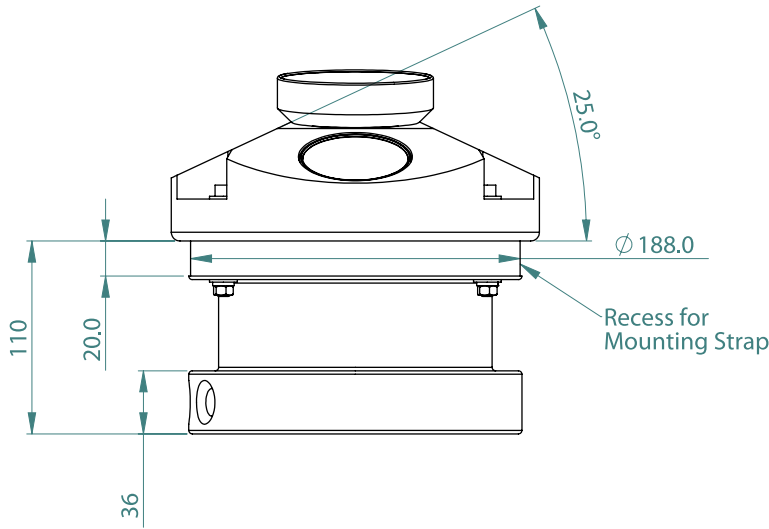
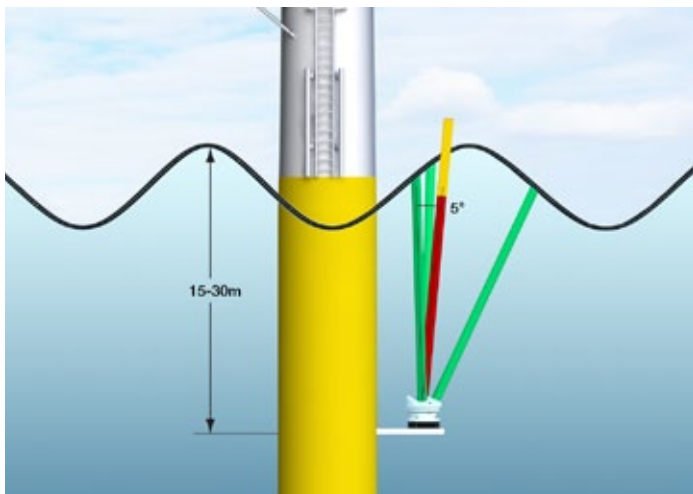


The AWAC Platform mount version offers the ability to mount the system on a subsurface buoy, or underwater directly to an offshore platform. This permits the instrument to be deployed underwater, for example directly to an offshore structure, close enough to the surface for high quality wave measurements, yet be removed from the dangers of exposure at the surface.

## AWAC Platform Mount



All dimensions in mm.



The "Platform Mount AWAC version", employs four acoustic transducers asymmetrically arranged on one hemisphere of the system to point away from the offshore platform.



The AWAC Platform mount version offers the ability to mount the system directly to an offshore structure close enough to the surface for high quality wave measurements, yet be removed from the dangers of exposure at the surface

CURRENT AND WAVE MEASUREMENTS IN THE OCEAN, LAKE AND LABORATORY



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True innovation makes a difference

| System                       |   |
|------------------------------|---|
| Acoustic frequency:          | 600kHz                                      |
| Acoustic beams:              | 4 beams, one vertical, three slanted at 25° |
| Vertical beam opening angle: | 1.7°  |
| Operational modes:           | Stand-alone or online monitoring            |

| Current Profile      |                                   |
|----------------------|-----------------------------------|
| Maximum range:       | 50m (depends on local conditions) |
| Depth cell size:     | 0.5 – 8.0 m                       |
| Number of cells:     | Typical 20–40, max. 128           |
| Maximum output rate: | 1Hz                               |

| Velocity measurements |                                       |
|-----------------------|---------------------------------------|
| Velocity range:       | ±10 m/s horizontal, ±5 m/s along beam |
| Accuracy:             | 1% of measured value ±0.5 cm/s        |

| Doppler uncertainty |                 |
|---------------------|-----------------|
| Current profile:    | 1cm/s (typical) |

| Wave measurements         |   |
|---------------------------|---|
| Maximum depth:            | 60m                                     |
| Data types:               | Pressure, one velocity along each beam  |
| Sampling rate (output):   | 1Hz velocity, 2Hz AST*                  |
| No. of samples per burst: | 512, 1024, or 2048. Inquire for options |

| Wave estimates             |                           |
|----------------------------|---------------------------|
| Range:                     | -10 to +10m               |
| Accuracy/resolution (Hs):  | <1% of measured value/1cm |
| Accuracy/resolution (Dir): | 2° / 0.1°                 |
| Period range:              | 1 - 100s                  |

| Depth(m) | cut-off period (Hs) | cut-off period (dir) |
|----------|---------------------|----------------------|
| 5        | 0.5 sec             | 1.5 sec              |
| 20       | 0.9 sec             | 3.1 sec              |
| 60       | 1.5 sec             | 5.5 sec              |

| Sensors               |   |
|-----------------------|---|
| <b>Temperature:</b>   | Thermistor embedded in housing                                  |
| Range:                | -4°C to 40°C  |
| Accuracy/ Resolution: | 0.1°C/0.01°C  |
| Time constant:        | <5 min  |
| <b>Compass:</b>       | Magnetometer  |
| Accuracy/Resolution:  | 2°/0.1° for tilt <20°   |
| <b>Tilt:</b>          | Liquid level  |
| Maximum tilt:         | 30°, AST* requires <10° instrument tilt                         |
| Up or down:           | Automatic detect  |
| <b>Pressure:</b>      | Piezoresistive  |
| Standard range:       | 0-100m  |
| Accuracy/Resolution:  | 0.5% of full scale/ Better than 0.005% of full scale per sample |

| Transducer configurations |                              |
|---------------------------|------------------------------|
| Asymmetric:               | 3 beams 90° apart, one at 5° |

| Materials |   |
|-----------|---|
| Standard: | Delrin and polyurethane plastics with titanium screws |

| Connectors          |            |
|---------------------|------------|
| Bulkhead (Impulse): | MCBH-2-FS  |
| Cable:              | PMCIL-8-MP |

| Environmental          |               |
|------------------------|---------------|
| Operating temperature: | -4°C to 40°C  |
| Storage temperature:   | -20°C to 60°C |
| Shock and vibration:   | IEC 721-3-2   |
| Depth rating:          | 300m          |

| Dimensions       |                           |
|------------------|---------------------------|
|                  | see drawing on front page |
| Weight in air:   | 6.2 kg                    |
| Weight in water: | 2.9 kg                    |

| Analog Inputs                            |   |
|--|---|
| Number of channels:                      | 2   |
| Supply voltage to analog output devices: | Three options selectable through firmware commands: <ul style="list-style-type: none"> <li>• -Battery voltage/500mA</li> <li>• +5V/250mA</li> <li>• +12V/100mA</li> </ul> |

|                |            |
|----------------|------------|
| Voltage Input: | 0-5V       |
| Resolution:    | 16 bit A/D |

| Data Recording      |   |
|---------------------|---|
| Capacity(standard): | 2 MB, can add: 32/176/352MB or 4GB (Prolog) |
| Profile record:     | Ncells×9 + 120                              |
| Wave record:        | Nsamples×24 + 46                            |

| Data Communication           |   |
|------------------------------|---|
| I/O:                         | RS 232 or RS 422                                  |
| Communication baud rate:     | 300–115200  |
| Recorder download baud rate: | 600/1200 k.Baud for both RS232 and RS422          |
| User control:                | Handled via «AWAC» software, or ActiveX® controls |

| Power              |  |
|--------------------|--|
| DC input:          | 9-18 VDC                                   |
| Peak current:      | 3A   |
| Power consumption: | Transmit power: 1–30W, 3 adjustable levels |
| Sleep consumption: | 0.0003 mW (RS232)<br>0.005 mW (RS422)      |

| Real time clock             |             |
|-----------------------------|-------------|
| Accuracy:                   | ± 1min/year |
| Backup in absence of power: | 1 year      |

**Offshore Cable**


The Nortek offshore cable can, when properly deployed, withstand tough conditions in the coastal zone. In RS 422 configuration, cable communication can be achieved for distances up to 5 km.

\*) AST = Acoustic Surface Tracking



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