OCEAN-BOTTOM SEISMOMETERS CME-4X11-OBS

The **CME-4211-OBS** and **CME-4311-OBS** seismometers are specially adapted models for ocean bottom applications. These models share technical parameters with the corresponding regular versions, but have a specially designed compact lightweight case, flat flexible signal cable and consume little power. Being pervious itself, these sensors are designed for installation inside titanium or glass deep-water spheres, which are used in ocean bottom installation.

The **CME-4211-OBS** is the lightest model of a three-component seismometer among our products.

Configuration	**Triaxial, orthogonal – Vertical, North, East**
Sensitivity	**2000 V/(m/s)**
Maximum input signal	**5 mm/sec**
Frequency bandwidth 4311 ***Limiting values***	**0,0167 (60 sec) – 50 Hz** ***0,0083 (120 sec) - 50 Hz***
Frequency bandwidth 4211 ***Limiting values***	**0,033 (30 sec) – 50 Hz** ***0,0167 (60 sec) – 100 Hz***
Maximum output swing	**±15V, differential mode**
Output impedance	**1000 Ohms**
Dynamic range at 1 Hz **4311 / 4211**	**123.5 dB / 113 dB**
Integral noise in the band 4311 ***0,0167 (60 sec) – 50 Hz*** ***0,0167 (60 sec) – 20 Hz***	**35.6 nm/sec (71,2 μV)** **22,5 nm/sec (45 μV)**
Integral noise in the band 4211 ***0,033 (30 sec) – 50 Hz*** ***0,1 (10 sec) – 20 Hz***	**76 nm/sec (152 μV)** **28,4 nm/sec (57.8 μV)**
Self-noise	**See plot for a standard sensor**
Cross-axis sensitivity	**-60 dB**
Non-linearity at 1 Hz	**0.5%**
Temperature range	**Standard -12°C - +55°C (10.4°F - 131°F)**
Supply voltage	**9.5 .. 16 V DC, 12 V DC nominal**
Supply current	**8 mA**
Settling time till correct readings after power on	**10 - 45 minutes, depending on the low frequency cut-off**
Mass Lock , Mass Centering	**None required**
Self-calibration	**Not available**
Connector type, cable	**Two-row 10-pin flat cable connector IDCC-10MR. Flat cable FRC-10 1.27mm with a connector IDC-10F**
Case accessories	**Pointer, 3 feet for on-surface testing**
Weight 4311 / 4211	**2.6 kg (5.72 lbs) / 2.2 kg (4,85 lbs)**
Dimensions, diameter x height	**160 x 116(127)mm (6.3” x 5”)**

Fig 2. The CME4211-OBS installation into a deep-water sphere.
Photo by courtesy of GeoPro GmbH, Germany

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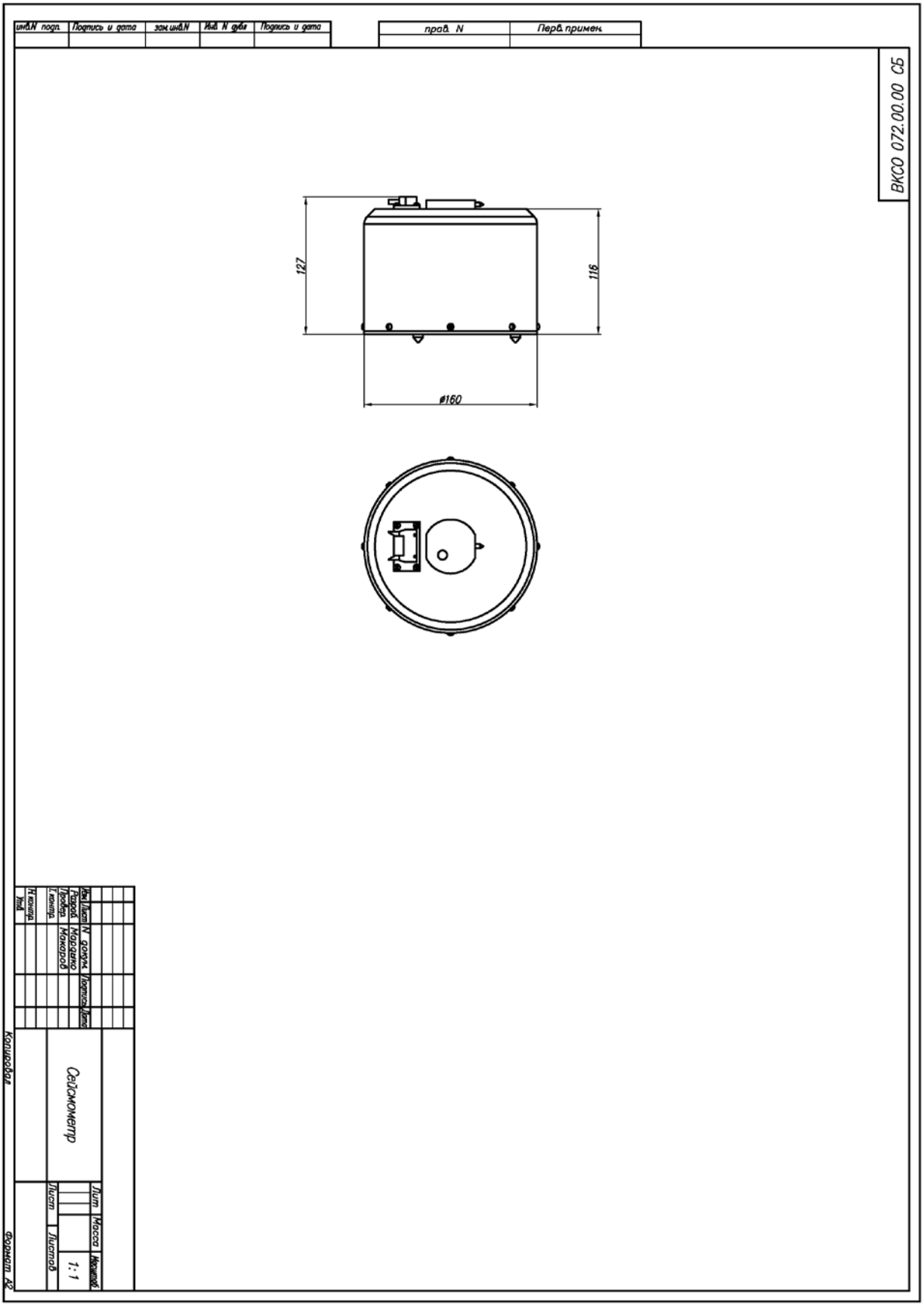

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