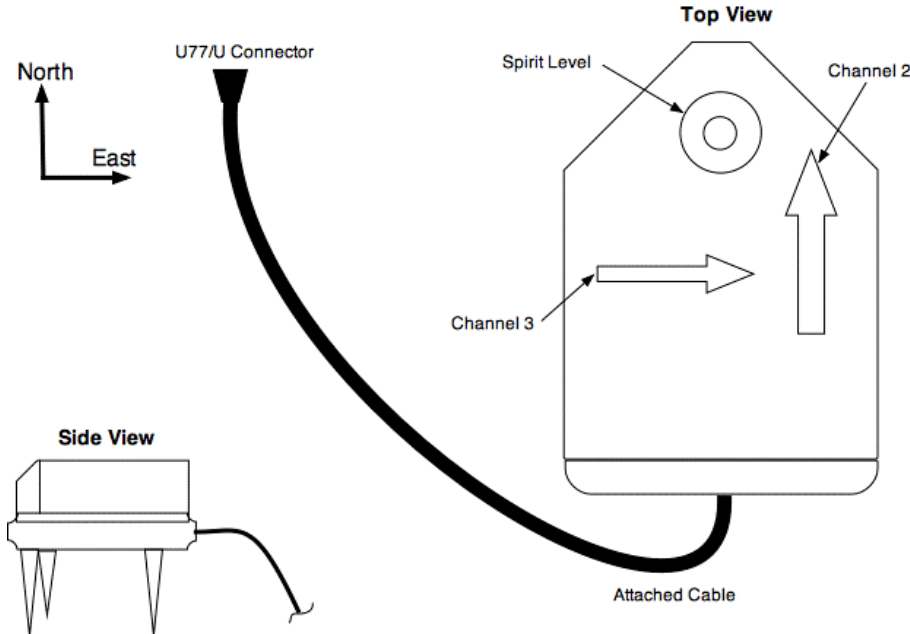


Summary Sheet for PASSCAL Sensor Geospace GS11-3D (or Y-28-3D)



Channel Order

(positive voltage on DAS channel means ground moved in given direction)

- 1 Down (Vertical)
- 2 North
- 3 East

Sensitivity

32.0 Volts/ Meter/ sec

Physical Characteristics:

Size: case 10x11x6.5 cm with 7.5cm spikes

Weight: 1.27 kg

Shipping Weight: 27 kg (for 10)

Shipping Box Size: 45.7x61x35.6 cm (R-box)

Power Consumption: None, passive sensor

Frequency Response:

Natural Freq. 4.5 Hz

Damping 0.700 critical

Zeros two at zero

Poles $-19.79 + 20.19i$

$-19.79 - 20.19i$

Installation Tips: (See also Y-28 Sensor Wiring and Orientation guide, these are TIPS not complete instructions)

1. Determine direction of orientation (e.g. North). The sensor has magnets – keep compass away.
2. Dig a shallow hole 4-6 inches deep, and roughly square. The Y-28 sensor is meant for direct burial into sand, soil or snow.
3. Note serial number of the sensor.
4. Align sensor to azimuth.
5. To level the sensor, push into ground and then adjust the sensor with your hands so that the bubble is in the center of the spirit level on the top of the sensor. Then carefully pat dirt/sand/snow around the sensor making sure that the sensor is still leveled. Then bury the sensor up to ground level.
6. To install the sensor on bedrock, remove the three legs by unscrewing them and then mount the sensor to the bedrock with plaster of paris or similar product. There must be enough material under the Y-28 to level the bubble and it must be leveled before the product sets.
7. Bury the sensor cable in a small trench or cover with rocks. Beware! Do not cut the sensor cable with the shovel. Carefully bury/cover the sensor cable to guard against wind noise and animals.
8. Plug sensor cable into jumper cable provided and then plug into the DAS.
9. Check the Monitor/Quick View on the DAS for proper sensor operation (“stomp test”).

Cabling Notes:

Sensor cable is ~3 meters long (unshielded). It is attached to the sensor on one end and has a U77/U connector on the other. PASSCAL provides a separate jumper cable to either the Ref Tek RT130 DAS or the Quanterra Q330 DAS, which may already be installed on the sensor when shipped.