

SENSOR-LOGGER for UNDERGROUND (SLUG)

Features:

- ▲ Inexpensive and versatile data-logging solution
- ▲ Pocket-size. Fits in 2.5" borehole
- ▲ 256kb (512kb optional) of FLASH memory
- ▲ Stores 12,000 16 bit words of data
- ▲ 9V Battery powered lasts up to 3 months
- ▲ Stores up to 3 month's data
- ▲ Reading rate 1/hr, 3/day, 1/day
- ▲ Download data Underground using PalmOS SlugSYNC™
- ▲ Extremely low cost
- ▲ Individual deployment on each instrument
- ▲ Wireless Options available soon
- ▲ Single sensor deployment

Previously so called "data-loggers" have been required to do additional tasks such as multiplexing and A/D conversion. To reduce the cost/instrument of this technology, designers enable several instruments to be logged at a single data-logger, adding still further to the complexity, size and cost of the device. With complexity comes the requirement for configuration (both hardware and software) and associated training. The result is an expensive, complex and bulky solution completely unsuited to mining deployment.

SLUG changes the Rules

All that changes with the SLUG. This is possible because all YieldPoint sensors transmit digital signals that require the minimum processing prior to writing into FLASH memory. Due to its simple design, incredibly small size and very low cost, each SLUG is dedicated to a single instrument. With this comes complete *versatility, flexibility and simplicity*: if a specific sensor needs to be monitored, SLUG can be deployed in a few seconds. No configuration is required since YieldPoint's digital sensors inform SLUG of critical information such as their SensorID, SensorType and the number of channels - just 'plug & SLUG'. Also, by minimizing the cost of a individual data-logger, high risk deployment close to blasts is viable and lead-wire (the most vulnerable part of any sensor) length can be minimized. If the SLUG is destroyed during deployment, the replacement will cost probably less than 10% of a typical datalogger.



Inside the SLUG



75% of the SLUG's space requirement consists of a 9V battery. By putting the SLUG into SLEEP mode between measurements the battery can last up to 3 mos. Even then if battery power is lost the data stored in slug will be retained. 512kb of memory will allow an instrument with up to 10 channels to be monitored 3 times/day up to 3 mos.

When the SLUG's memory is full it can be configured to overwrite beginning at the first memory address or just stop logging.

Data from the SLUG is output into CSV text files. These can easily be imported into Microsoft Excel or any database package, and is fully compatible with YieldPoint's MineScope database.

Advantages:

- ▲ Low cost
- ▲ Tough and rugged
- ▲ Recessed into borehole for Protection
- ▲ Rapid deployment
- ▲ Rapid redeployment
- ▲ No configuration
- ▲ Reduce leadwire lengths.

Specifications:

Dimensions: 56mm x 56mm x 30mm

Battery: 9V

Memory: 256kb FLASH memory 12,000 16bit samples, 512kb optional.

Storage: 16 bit resolution

Frequency: 1/hr, 3 rdgs/day, 1 rdg/day

Duration: 3mos (3 rdg/day), Alkaline battery.