



## **BEP-01 COMBINATION BOREHOLE PROBE**

### **DESCRIPTION**

The BEP-01 is a combination probe designed to measure two physical rock properties in a borehole. The probe is equipped with the following sensors:

- ❖ Induction conductivity sensor.
- ❖ Natural gamma (Total count and KUT).

The BEP-01 is controlled by an on-board microprocessor, which can sample up to 10 separate sensors at a rate of 2 Hz with up to 24 bits of resolution. The sensors are contained in a non-magnetic, non-conductive housing, that is pressure rated to 3000 meters of water pressure.

The BEP-01 is compatible with the BIN-04 or BIN-07 digital data interface and IFG Corporation's standard 4 conductor logging cable or mono cable.

The BEP-01 is a cost-effective way to obtain a number of geophysical logs in a single survey run. The probe provides the measurement of 4 channel radiometric and inductive conductivity.

The gamma sensor is a single crystal CsI(Na) detector with a dimension of 25mm X 75mm. The radiometric channels are total count , K40, Bi214 and Tl208. The inductive conductivity sensor is a single coil that measures the conductivity of the rock and has a penetration of 5cm.

This sensor is designed for high conductivity (>5mS/m), with a very large dynamic range.

SENSOR	TYPE	RANGE	SENSITIVITY
Conductivity	Induction	1 to 10 <sup>6</sup> ppm	1 ppm
Gamma	Scintillometer	0 to 500,000 CPS	CPS/0.5sec
TC Channel	Scintillometer	100 – 3000 keV	CPS/0.5sec
K40 Channel	Scintillometer	1334 – 1604 keV	CPS/0.5sec
Bi214 Channel	Scintillometer	1631 – 2368keV	CPS/0.5sec
Tl208 Channel	Scintillometer	2440 – 2862keV	CPS/0.5sec



### BEP-01 COMBINATION BOREHOLE PROBE

PROBE SPECIFICATIONS	
Electrodes	Naval brass
Housing	High strength filawounds tube
Maximum Depth	3000 meters
Connection	4 pin connector (Gearhardt Owen)
Temperature Range	Storage; -35 to +70°C Operating: 0 to +70°C Extended: 0 to +120°C
Sampling Rate	2 Hz
Output	10mA current loop, 4800 baud
Supply Voltage	24VDC @ 5W (at probe header)
Dimensions	42mm diameter x 1.5 meter long
Weight	3.0 kg