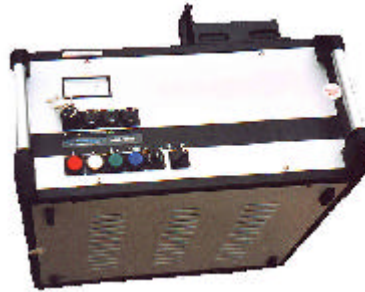




## Borehole Impacter Source BIS for SH-Waves

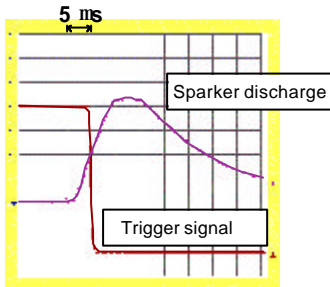
The basic seismic crosshole source equipment consists of the electric surge generator IPG and the remote control unit RCU. To the surge generator various seismic sparker sources can be connected. Triggering of the seismic acquisition system is performed by the remote unit.



IPG 1005

### Technical data IPG 1005

Impulse voltage: 5 KV  
 Impuls energy: 1000 J  
 Repetition rate: from 4 to 7 s  
 Power supply: 230 V 50 Hz 2,5 A  
 Dimensions: 52 x 25 x 50 cm  
 Weight: ~ 52 Kg  
 Working Mode: Manual/Continuous  
 Emergency OFF button  
 Safety key switch



The remote control unit RCU converts the reference signal of the surge generator to a trigger signal (right). Sparker pulses are released through manual or automatic triggering of the generator by the remote unit. The background noise can be recorded automatically and used to interrupt data acquisition if the noise level is too high. Trigger accuracy is below 10  $\mu$ s (left).



RCU

### Technical data RCU

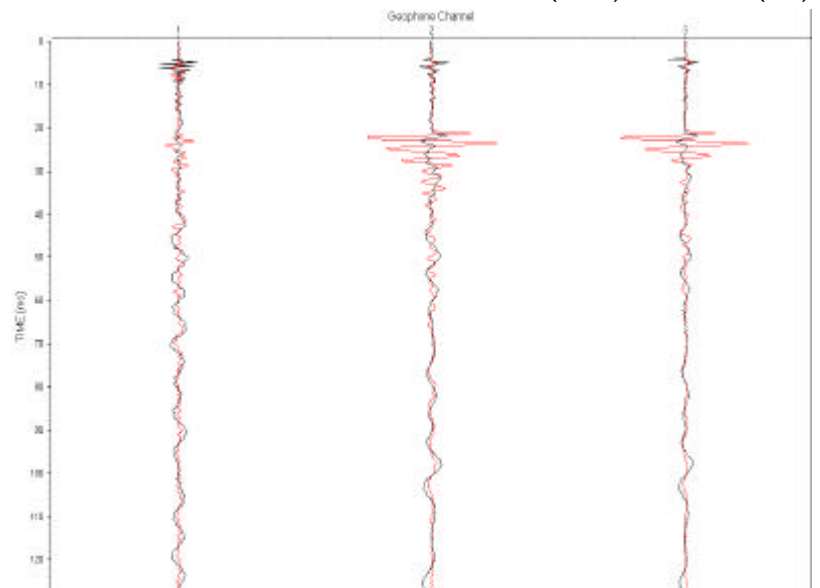
TTL Low/High trigger output  
 Trigger test option  
 Trigger level adjustment  
 Impulse Counting  
 Single shot release  
 Continuous shot release  
 ( with variable repetition rate from 4..7 sec.)  
 Emergency OFF button  
 Safety key switch



To generate SH-waves in the borehole the BIS-SH is used (left). The BIS-SH consists of a sealed probe part and a pneumatic clamping system. The BIS-SH can be rotated using a pipe string.

The source works in dry and water filled boreholes.

Comparison between SH66 (black) and BIS-SH(red)



### Technical data BIS-SH

Housing: stainless steel  
 Length: approx 70cm  
 Diameter: for 3 to 5 " holes  
 Depth range: 60m (or more)  
 Clamping: pneumatic  
 Rotation: via pipe string