

## **GF INSTRUMENTS**

### **PRODUCT SET DESCRIPTION – RESISTIVITY SYSTEMS AND ACCESSORIES**

**Valid from January 1, 2015**

#### **RESISTIVITY & IP SYSTEMS**

##### **Recommended measuring sets for resistivity & IP tomography:**

*(Interpretation software and other optional accessories that are not listed here are to be ordered separately, if required)*

- RES1-ECONOMY** Economy set with switch box I (for 48-electrodes) includes:
- ARES single-channel resistivity & IP system (with standard accessories)
  - switch box I (for single-channel use, for connection of passive multi-electrode cable (48 electrodes)
  - 1 pair of connectors for user- made passive multi-electrode cables
- RES2-PASSIVE** Passive cable set with 48 electrodes includes:
- ARES single-channel resistivity & IP system (with standard accessories)
  - switch box I (for single-channel use, for connection of passive multi-electrode cable (48 electrodes)
  - 4 pcs of MCC5 passive multi-electrode cables (12 outlets in one section, spacing 5m (5.5m), on the reel, stainless steel electrodes and fixing rubber o-rings included)
- RES3-ACTIVE** Active cable set with 48 electrodes includes:
- ARES single-channel resistivity & IP system (with standard accessories)
  - 6 pcs of MSC5 active multi-electrode cables for single-channel use (8 switch cylinders in one section, spacing 5m (5.5m), stainless steel electrodes and fixing rubber o-rings included)
- RES4-AACTIVE** Advanced active cable set with 48 electrodes includes:
- ARES II/1 single-channel resistivity & IP system, upgradable to 10 channels
  - 6 pcs of MSC5 active multi-electrode cables for single-channel use (8 switch cylinders in one section, spacing 5m (5.5m), stainless steel electrodes and fixing rubber o-rings included)
- RES5-5CH** 5-channel advanced active cable set with 72 electrodes includes:
- ARES II/10: 10-channel resistivity & IP system (with standard accessories)
  - 9 pcs of ME II/5 – 5M active multi-electrode cables for 5-channel use (8 outlets and switch box in one section, 5m (5.5m) spacing, stainless steel electrodes and fixing rubber o-rings included)
- RES6-10CH** 10-channel advanced active cable set with 120 electrodes includes:
- ARES II/10: 10-channel resistivity & IP system (with standard accessories)
  - 10 pcs of ME II/10-5M – active multi-electrode cables for 10-channel use (12 outlets and switch box in one section, on the reel, 5m (5.5m) spacing, stainless steel electrodes and fixing rubber o-rings included)
- RES7-VES** VES set includes:
- ARES single-channel resistivity & IP system (with standard accessories)
  - VES cables (2 x 500 m, on the reels, for current electrodes, 2 x 100 m, on the reels, for potential electrodes, stainless steel electrodes included )
- RES8-WATER** Water/borehole basic set includes:
- ARES II/10: 10-channel resistivity & IP system (with standard accessories)
  - switch box II/10 (for 10-channel use, for connection of passive multi-electrode cable (48 electrodes)

**Resistivity systems and accessories:**

**1. Single-channel systems and accessories:**

- ARES** single-channel resistivity &IP system (850W, 5A, 2000 Vp-p)  
Standard accessories:  
- transport case  
- T-piece (for connection of multi-electrode cable sections or cables for current and potential electrodes – 1 pair each)  
- cable for external 12 V battery (protective)  
- RS232 and USB cables  
- AC/DC adapter (for all countries)  
- PC software ARES
- ARES II/1** single-channel resistivity &IP system upgradable to 10 channels (850W, 5A, 2000 Vp-p)  
Standard accessories:  
- transport case  
- T-piece (for connection of multi-electrode cable sections or cables for current and potential electrodes – 1 pair each)  
- cable for external 12 V battery (protective)  
- USB cable  
- AC/DC adapter (for all countries)  
- PC software ARES

**Measuring multi-electrode cables for single channel use:**

*Active (intelligent) multi-electrode cable sections:  
(Transport case is delivered with every 2 or 3 cable sections)*

- MCS2** 8 switch cylinders in one section, 2 m (2.2 m) spacing  
(stainless steel electrodes and fixing rubber o-rings included)
- MCS5** 8 switch cylinders in one section, 5 m (5.5 m) spacing  
(stainless steel electrodes and fixing rubber o-rings included)
- MCS10** 4 switch cylinders in one section, 10 m (11 m) spacing  
(stainless steel electrodes and fixing rubber o-rings included)

*Passive multi-electrode cable sections and accessories:*

- MCC2** 12 outlets in one section, spacing 2 m (2.2 m), on the reel  
(stainless steel electrodes and fixing rubber o-rings included)
- MCC5** 12 outlets in one section, spacing 5 m (5.5 m), on the reel  
(stainless steel electrodes and fixing rubber o-rings included)
- MCC10** 12 outlets in one section, spacing 10 m (11 m), on the reel
- SB1** switch box I for single-channel use  
for connection of passive multi-electrode cable (48 electrodes)
- CCBL1** connection cable for cascade of switch boxes I (length 240 m)

**Accessories for VES, RP, SP (1D methods):**

- ABCBL** reels with cable (2 x 500 m) for current electrodes (el. incl.)
- MNCBL** reels with cable (2 x 100 m) for potential electrodes (el. incl.)
- VES1** VES adapter for ARES / ARES II/1  
for connection of 5 pairs of potential el.+ 1 pair of current el.

## 2. Multi-channel systems and accessories:

<b>ARES II/10</b>	10-channel resistivity & IP system Standard accessories: - transport case - T-piece (for connection of multi-electrode cable sections or cables for current and potential electrodes – 1 pair each) - VES & profiling adapter II - Cable for external 12 V battery (protective) - USB cable - AC/DC adapter (for all countries) - PC software ARES
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### Measuring multi-electrode cables for 5- or 10-channel use:

*Multi-electrode cable II sections for 10-channel use:*

<b>ME II/10-5M</b>	cable for 10-channel use 12 outlets and switch box in one section, spacing 5 m (5.5 m), on the reel (stainless steel electrodes and fixing rubber o-rings included)
<b>ME II/10-10M</b>	cable for 10-channel use 6 outlets and switch box in one section, spacing 10 m (11 m), on the reel (stainless steel electrodes and fixing rubber o-rings included)
<b>ME II/5-5M</b>	cable for 5-channel use 8 outlets and switch box in one section, spacing 5 m (5.5 m) (stainless steel electrodes and fixing rubber o-rings included)
<b>ME II/5-10M</b>	cable for 5-channel use 8 outlets and switch box in one section, spacing 10 m (11 m), on the reel (stainless steel electrodes and fixing rubber o-rings included)

*Passive multi-electrode cable sections and accessories for 5- or 10-channel use:*

<b>MCC2</b>	12 outlets in one section, spacing 2 m (2.2 m), on the reel (stainless steel electrodes and fixing rubber o-rings included)
<b>MCC5</b>	12 outlets in one section, spacing 5 m (5.5 m), on the reel (stainless steel electrodes and fixing rubber o-rings included)
<b>MCC10</b>	12 outlets in one section, spacing 10 m (11 m), on the reel (stainless steel electrodes and fixing rubber o-rings included)
<b>MCC2W</b>	cable for water use - moving applications 24 outlets, 2 m spacing, 10 m lead-in part, on the reel
<b>SB2/10</b>	switch box II/10 for 10-channel use for connection of passive multi-electrode cable (48 electrodes)
<b>SB2/5</b>	switch box II/10 for 5-channel use for connection of passive multi-electrode cable (48 electrodes)
<b>CCBL10</b>	connection cable for cascade of switch boxes II/10 (length 240 m)
<b>CCBL5</b>	connection cable for cascade of switch boxes II/5 (length 240 m)

### Accessories for VES, RP, SP (1D methods):

**ABCBL** reels with cable (2 x 500 m) for current electrodes (el. incl.)

**MNCBL** reels with cable (2 x 100 m) for potential electrodes (el. incl.)

*For single-channel measurements ARES II can operate all ARES accessories (except VES Adapter).*

**Optional and spare accessories for ARES/ARES II resistivity systems:**

<b>BP</b>	12 V battery pack for ARES/ARES II (with battery charger)
<b>CONV</b>	converter 230 V / 115 V AC to 12 V DC for ARES/ARES II - for supplying the ARES/ARES II system from a generator (preferably HONDA EU 10i)
<b>PCBL</b>	protective cable for external 12 V battery (with protection against confusion of the battery poles)
<b>EL35</b>	spare stainless steel electrode (length 350 mm, diameter 10 mm)
<b>NP</b>	non-polarizable electrode (Cu – CuSO <sub>4</sub> cup) – set of 2 electrodes

**Remote control sets for ARES II**

<b>RC serial</b>	RS232 set for remote control (10 m long cable included)
<b>RC radio</b>	radio set for remote control
<b>RC GSM</b>	GSM set for remote control

**3. Resistivity & IP system for deep VES and 8-channel RP**

<b>GEPS-2000</b>	resistivity and IP device (3500 W) for deep VES and 8-channel RP consists of transmitter and detachable receiver Standard accessories (delivered with the system, included in the price): - engine power generators – 2 pcs - connection cables between generators and GEPS-2000 - measuring software - interpretation software IPI2Win for VES and VES IP <i>Notes:</i> <i>No transport case is delivered with the device.</i> <i>The system is operated from user PC (notebook) – not included in the delivery.</i>
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**Optional accessories:**

*Measuring cables for VES (for ABmax of 3000 m):*

<b>GEPS-ABCBL6</b>	reels with cable (6 x 500 m) for current electrodes (electrodes not included) <i>(the reels are delivered with max 500m cable for better handling, for longer AB they can be connected one after the other )</i>
<b>GEPS-MNCBL</b>	reels with cable (2 x 250 m) for potential electrodes (electrodes not incl.) <i>Other cable lengths available on request</i>

*Measuring cables and accessories for 8-channel resistivity profiling:*

<b>GEPS-ARRAY</b>	potential array (with 9 outlets, on reel, 10 m spacing, electrodes included)
<b>GEPS-ABCBL2</b>	reels with cable (2 x 500 m) for current electrodes (electrodes not incl.)
<b>RES2DINV</b>	data processing software RES2DINV - <i>actual price on request</i>