

## Data Sheet



## Audio Frequency System Locator Set

The audio frequency system Locator Set is used particularly for accurate location of underground cables and routes of metallic gas or water pipes. With different accessories this system becomes a universal, indispensable device for electricity boards, industry and waterworks utilities. In general the Locator Set can be applied for the following jobs:

- route tracing of cables and metallic gas and water pipes
- depth evaluation of cables and metallic pipes
- cable selection
- cable detection on live lines
- location of cable and line joints
- accurate location of cable faults according to the twist method
- accurate location of cable faults according to the acoustic method
- acoustic pin pointing combined with propagation time measurement (indication of fault distance, only with BM 30)

**The audio frequency system includes the following main components:**

Audio frequency receiver	UL 30
Audio frequency transmitter with standard accessories	TG 20 / 50

For description of the different audio frequency transmitters and receivers please see our respective data sheets.

**Technical data UL 30:**

<b>Tracing</b>	
Receiving frequency for search coil	2 kHz, 10 kHz, others selectable
Passive reception	50 / 60 Hz mains signal
Input sensitivity	< 10 nA
<b>General</b>	
Filter	digital
Amplification	> 120 dB, adjustable
Headphone output	3 - pin jack plug, 6.3 mm
Operating temperature	-20°C....+55°C
Power supply	4 x 1.5 V cells (IEC LR 6)
Battery life (normal operation)	approx. 40 h
Weight	550 g

**Technical data TG 20/50**

Output power	0 - 50 VA in mains operation 0 - 20 VA in battery operation
Output current	8 A max.
Frequencies	2 frequencies, switchable 2 kHz $\pm$ 0,1 %, k-factor $\leq$ 1,5 % at 4 VA 10 kHz $\pm$ 0,1 %, k-factor $\leq$ 3 % at 4 VA
Output impedance	In 7 steps 1 $\Omega$ / 3 $\Omega$ / 10 $\Omega$ / 30 $\Omega$ / 100 $\Omega$ / 300 $\Omega$ / 1000 $\Omega$ Automatic or manual adjustment
Charging unit (incorporated)	Overcharge protection - when in mains supply, charging is made in all operating modes
Low level discharge protect.	Instrument switched off before battery is completely empty
Operating time	At 20 VA; approx. 2.5 h
Operating temperature	- 20 to + 50 °C
Power supply	Mains connection 110-120 V / 220-230 V / 240 V $\pm$ 10 %; 50 - 60 Hz Internal battery 12 V; 9,5 Ah External supply 12 V - 24 V DC (reverse battery protection)
Dimensions (w x h x d)	Approx. 290 x 130 x 240 mm
Weight	Approx. 9.5 kg

## Locator Set with Universal Locator UL 30

### Delivery includes:

- Transport case for Locator Set
- TG 20 / 50 without accessories
- Carrying strap TG 20 / 50
- Mains cable TG 20 / 50
- 3m grounding cable with connection lamp
- 2m connection lead black, touch proofed
- 2m connection lead red, touch proofed
- Universal Locator UL 30 without accessories
- Battery alkaline-manganese; 1,5 V; IEC LR 6 (4 pcs.)
- Carrying strap UL 30
- Headphone KH 30
- Detecting rod SP 30
- Auxiliary line 25 m, on hand reel
- Tapping terminals, black / red
- Earth spike
- Operation manual

### Options:

- Groundmicrophone BM 30
- Selecting coil for 2,000 Hz; AS 2 / 30
- Selecting coil for 10,000 Hz; AS 10 / 30
- Loop antenna RA 10
- Current transformer clip-on-device AZ10 / D 70 mm
- Current transformer clip-on-device AZ10 / D 80 mm
- Current transformer clip-on-device AZ10 / D 125 mm
- Battery connection cable
- Enclosed headphone (for suppression of ambient noise) KH 8 S
- Accessories kit sheath fault location UL 30