

# SAT-20C

Cable/pipe Locator

**AITELONG**  
Keeping your system safe and running



◎ **Transmitter**

Quit the injected mode automatically when the pipe insulation resistance is low; Transmitter alarms when the residual voltage is high.

◎ **Receiver**

Adjust the gain of the receiver in order to optimize the receiver in the state; Pitch change by measuring the signal directly reflects the size.

◎ **Stethoscope and Clamp**

Be used for precisely locating the pipeline in the complex situation.

- ◎ Splicing loss detection
- ◎ Locating underground cable/pipe
- ◎ Measuring the depth of underground cable/pipe
- ◎ **L**ocating the target pipeline among pipelines.
- ◎ **W**idely used for telecom, electricity, water, gas, geophysical exploration, petrochemical, municipal and other industries.

## Using advanced testing technology and component

- ◎ The application of using multi-coil electromagnetic technology improves the accuracy of pipe locating pipeline depth measuring and objectives pipe recognition ability.
- ◎ Use of advanced signal processing technology and the latest integrated circuit components.

## Meeting different measurement frequencies

- ◎ Users can choose from 480Hz、31KHz frequencies according to the actual situation;
- ◎ Users also can customize measurement frequencies for special requirement (must stated in the order).

## Different mode and function to improve test efficiency

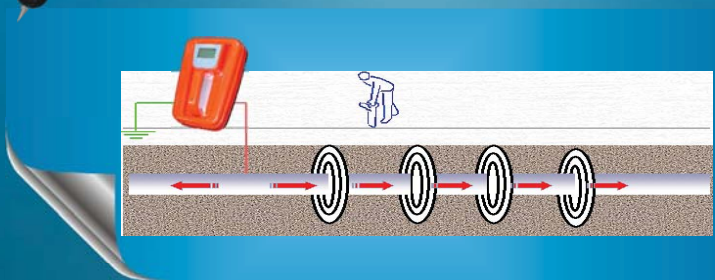
- ◎ Peak mode: positioning route by measuring the max value of the signal
- ◎ Valley mode: positioning route by measuring the minimum value of the signal
- ◎ Route orientation: quickly and intuitively determine the route direction
- ◎ Current measurement (CM): detect the target pipeline by measuring the signal of the current
- ◎ Stethoscope: identify the loaded pipeline by auscultating.

## Real-time testing of battery

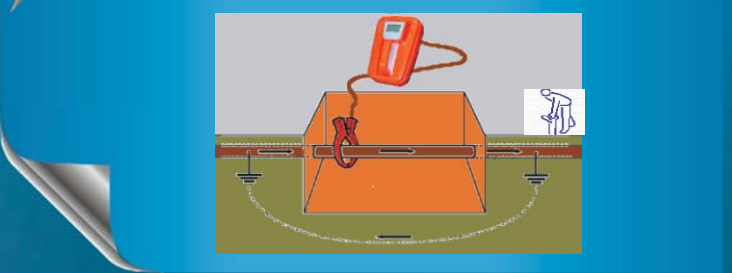
- © It will alarm and automatically shut down when battery power is lower than the protection value.

## A variety of measuring signals transmit mode

- © Injection: injection point for a pipeline.



- © Clamp: exposed for a period of pipeline under test, easy to clamp the pipe clamp



- © Induction: for no injection point and can not use the clamp when the pipeline.



## Specification

### Transmitter index

- © Signal frequency:
  - Injection :480Hz、31KHz
  - Induction :31KHz
  - Clamps :31KHz
- © Output voltage : 0-400Vp-p according to insulation variance
- © Output waveform : sine wave
- © Power supply : 12VDC 4.5AH Ni-NH Battery
- © Maximum output power :10W

### Enviromental parameters

- © Working temperature: -20℃~+50℃
- © Storage temperature: -40℃-70℃
- © Humidity: 10%~90%
- © Atmospheric pressure: 86~106KPa
- © Ambient noise: ≤60dB

## Receiver parameters

- © Power consumption: <1.0W
- © Power supply: 12V DC 1.8 AH Ni-NH Battery
- © Maximum depth: 4.5meter (normally)
- © Depth measurement error:  $\pm 0.05h \pm 5\text{cm}$  (h means the depth of pipeline)
- © Route error: ≤5cm
- © test pipeline routing and effective length
  - Injecting: at least 10Km (normally);
  - Clamp: at least 6Km (normally);
  - Induction: at least 3Km (normally);

Note: normal condition means there is no insulation faults and other distractions when testing.

## Physical property

Name	Weight(Kg)	Overall dimension(mm)
Transmitter	3.4	348×239×175
Receiver	2.6	648×260×130
Overall(Gross Weight)	14	790×250×420