



HXD101

Load monitoring unit

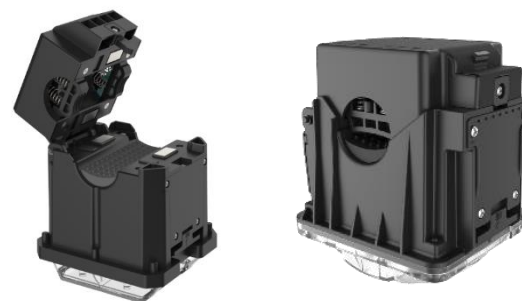
Class 0.5

Focus on creating value for clients

HXD101

The load monitoring unit is used to monitor the current of overhead lines of 35KV and below, and it has functions such as data acquisition, processing and communication.

The main station compares the data from the monitoring points with that of users to identify suspected users with abnormal electricity consumption, achieving the goal of anti-electricity theft and reducing line losses.



MAIN FUNCTIONALITIES

Measurement

- Current accuracy class 0.5.
- Supports sampling current from lines of 35kV and below.
- Supports sampling the electric field of lines of 35kV and below to obtain phase information.

Anti- electricity Stealing

- Monitor the current on the primary side of the distribution transformer and compare it with the user data to determine abnormal line loss.
- Monitor the current in the medium-voltage side section in sections and locate the abnormal line loss section.
- Combined with intelligent algorithms, calculate the daily line loss power consumption.

Easy Maintenance

- Remote firmware upgrade from the master station.
- Local firmware upgrade through Bluetooth.
- Local maintenance through Bluetooth.

Easy Installation

- Split-core current transformer.
- Install without power interruption using dedicated power tools.

High Ingress Protection Class

- IP67.
- Outdoor installation ready.

Data Collection

- It can store no less than 90 days of current curve data. (Under the condition of a 15-minute sampling interval).
- Collects data on request or based on sudden current events.

Back-up Power

- It is equipped with a high-performance and large-capacity disposable lithium battery.
- The built-in supercapacitor supports transient power requirements.

Electromagnetic induction energy acquisition

- Electrical energy can be obtained from power lines through the principle of electromagnetic induction for the use of equipment.
- The static power consumption is as low as 5mW.

Communication

- Integrated GPRS/3G/4G for up-link.
- 1 GPS for obtain location and precise time scale information.
- 1 Bluetooth for local firmware update and maintenance.

Synchronization

- Support time synchronization both locally and remotely.

SPECIFICATIONS

ACCURACY	Active	Class 0.5
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NOMINAL VOLTAGE	35kV and Below
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CURRENT RANGE	1A~6A: $\pm 0.2A$ 6A~30A $\pm 0.75\%$ 30A~600A $\pm 0.5\%$
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STARTING CURRENT	1A
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FREQUENCY	50 / 60Hz, +/-5%
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POWER CONSUMPTION	Static power	< 5mW
	Dynamic power	< 12W

TEMPERATURE RANGE	Operation	- 40 ° C to +70 ° C
	Storage	- 40 ° C to +70 ° C

HUMIDITY RANGE	Up to 95%
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PROTECTION DEGREE	IP 67
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EMC	Electrostatic discharge	Contact discharge 8KV Air discharge 15KV
	Surge immunity	4KV/2KA
	Electromagnetic RF Fields	Frequency range 80MHz to 1000MHz and 1.4GHz to 2GHz Without current 30V / m

RTC	Clock Accuracy	< 0.5s / day
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STANDARDS	IEC standard	IEC 62052-11:2003	IEC 60529:2013
		IEC 60695-11-11:2014	IEC 60068-2-2:2007
		IEC 60068-2-11:2021	ISO 2859-1:1999

COMMUNICATION	2G/3G/4G	LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B28/B66 LTE-TDD: B40 WCDMA: B1/B2/B4/B5/B8 GSM/EDGE: B2/B3/B5/B8
	Bluetooth	BT5.1

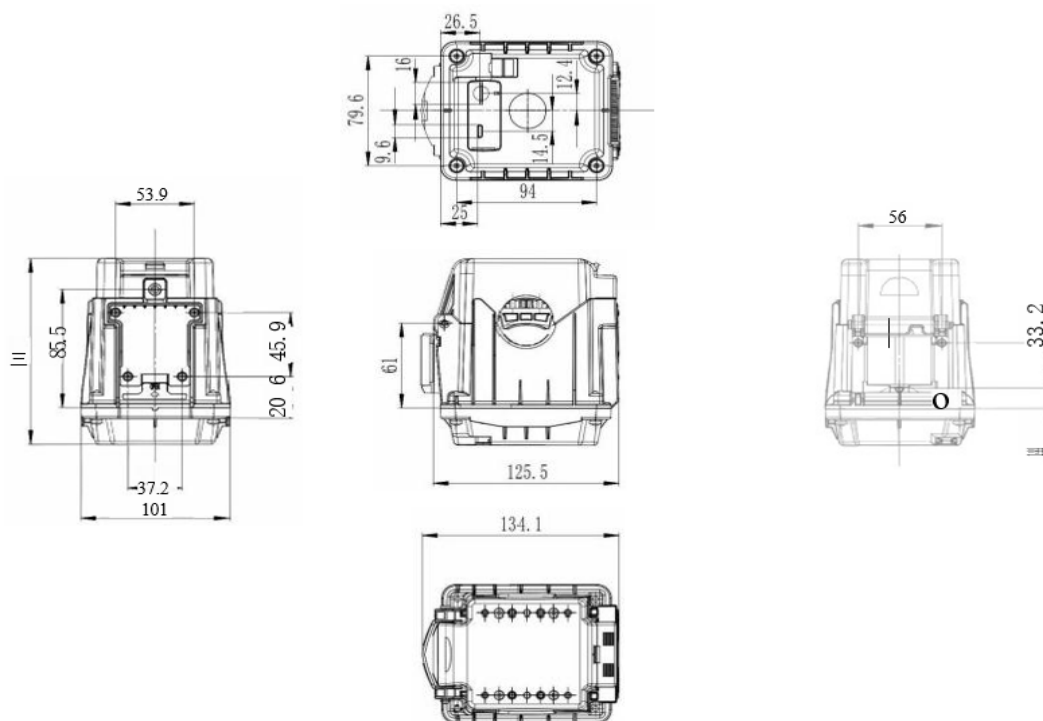
Location	GPS
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BATTERY	19Ah
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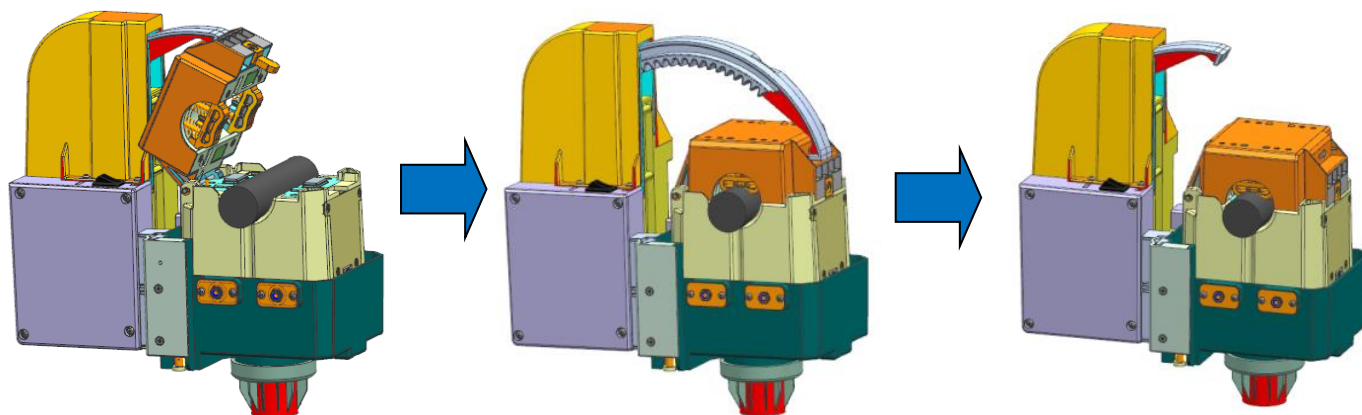
WEIGHT	About.1.5 kg
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DIMENSION	(L x W x H)	130mmx 101mmx 135mm
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■ Dimensions



■ Installation Diagram



COMPANY HEADQUARTERS

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