



# HEXEJ201

HEXEJ201 is cost effective all in one device comprising full function meter, data concentrator and transformer protection system integrated in one package

## Outdoor Transformer Monitoring Terminal

# HXEJ201

HXEJ201 is a single package device integrating all following 3 devices into just 1 device to bring costs significantly down and make installation easier and quicker

Right under distribution transformers usually three electronics devices can be found:

- 1– E–meter for measuring energy and other electrical parameters of the transformer
- 2– Data concentrator to collect data from smart meters under the transformer (on the feeder) and send to master station
- 3– Transformer monitoring and protection system to retain safe operation of the transformer

HXEJ201 communicates with connected meter via built–in PLC / RF modem and transfers message to master station through built–in GPRS / 3G / 4G modem.



## HIGHLIGHTS

### Industrial Design

- o Runs industrial light–weight RTOS
- o Designed to work in harsh environment like frequently voltage fluctuating networks

### Last Gasp Operation

- o Detects power off and sends message to master station about latest status using its internal battery

### Easy Maintenance

- o Remote firmware upgrade from the master station
- o Local firmware upgrade through USB
- o Local maintenance using HHU / PC software

### Easy Installation

- o Split Rogowski coil
- o Installation without power supply interruption to customer

### Open Protocol Compliance

- o Supporting popular and open protocol of DLMS/COSEM

### Multiple I/O Interface

- o Input from main circuit breaker for its status
- o Input from different sensors

### Large Capacity

- o 30 days of data of 1024 meters for daily billing
- o 15 days of data of 255 meters for hourly load profile
- o 365 days of data of 1024 meters for monthly billing data

### High Ingress Protection Class

- o IP65 but actual protection is beyond
- o Outdoor installation ready

## MAIN FUNCTIONALITIES

### Measurement

- o Instantaneous values like voltage, current, power, power factor
- o 4 quadrant energy: active, reactive and apparent

### Data Collection

- o Manages up to 1024 meters for data collection and concentration
- o Collects data on request or based on schedule or once meters report event
- o Provides master station a transparent access to meters

### Transformer Monitoring and Protection

- o Calculation of both copper and iron losses
- o Overload detection and alarm
- o Low power factor detection and alarm

### Power Quality Monitoring

- o Voltage and current unbalance
- o Sag and swell
- o Harmonic factors
- o Power outage

### Events / Alarms

- o Collects events / alarms from the entire meters under the transformer
- o Generates self diagnosis events / alarms
- o Manages all events / alarms

### Communication

- o Integrated GPRS / 3G / 4G for up–link
- o Integrated PLC / RF for down–link
- o 1 USB for local firmware update
- o 1 WIFI for local maintenance

### Synchronization

- o Supports time synchronization both locally and remotely

### Security

- o Full end to end data encryption

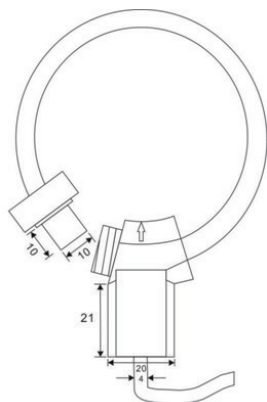
### Local and Remote Access

- o Hexing's Central System
- o PC software
- o HHU

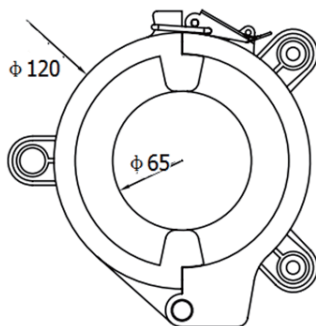
## TECHNICAL SPECIFICATIONS

<b>METERING ACCURACY</b>	Active energy: Reactive energy:	Class 0.5s Class 2
<b>NOMINAL VOLTAGE</b>	3 phase 4 wire 1 phase 3 wire	3 x 220 / 380V, 3 x 230 / 400V, 3 x 240 / 415V 120V
<b>VOLTAGE RANGE</b>		0.8–1.2Un
<b>FREQUENCY</b>		50 / 60Hz
<b>FREQUENCY RANGE</b>		47–52Hz / 57–62Hz
<b>CURRENT RANGE</b>	Ib (Imax) Range	50(500)A , 100(1000)A 1A~Imax (type1) , 20A~Imax(type2)
<b>POWER CONSUMPTION</b>	Voltage circuit :	< 5W, < 10VA
<b>TEMPERATURE RANGE</b>	Operation: Storage and transportation:	–30 ° C to +70 ° C –40 ° C to +85 ° C
<b>HUMIDITY RANGE</b>		Up to 100%
<b>PROTECTION DEGREE</b>		IP65
<b>EMC</b>	Electrostatic discharge Fast transient burst Surge immunity Electromagnetic RF fields	Contact discharge 8KV Air discharge 15KV 4KV 4KV Frequency range 80kHz to 2000MHz With current 10V / m Without current 30V / m
<b>INSULATING STRENGTH</b>	Impulse voltage AC voltage	1.2 / 50 μ s main connections 8KV 4KV during 1min
<b>STANDARDS</b>		IEC 61000–4–3, IEC 61000–4–2, IEC 61000–4–4 IEC 62052–11, IEC 62053–21, IEC62053–22 IEC 62053–23, etc.
<b>RTC</b>	Clock accuracy	< 0.5s / day
<b>COMMUNICATION</b>	Built-in	WIFI, USB, GPRS / 3G / 4G, PLC / RF
<b>HOUSING MATERIAL</b>		Polycarbonate
<b>WEIGHT</b>		approx. 1.0 kg
<b>DIMENSION</b>		210mm x 195mm x 70mm ( L x W x H )

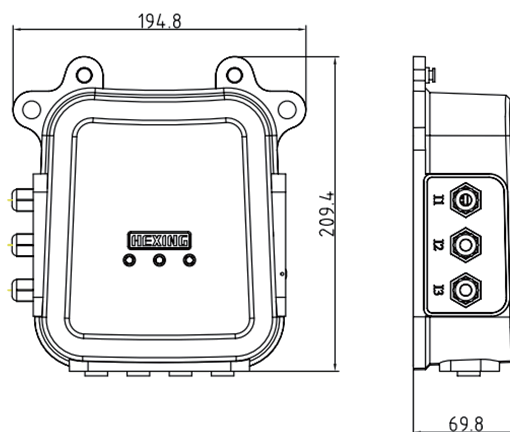
## DIMENSION



TYPE1



TYPE2

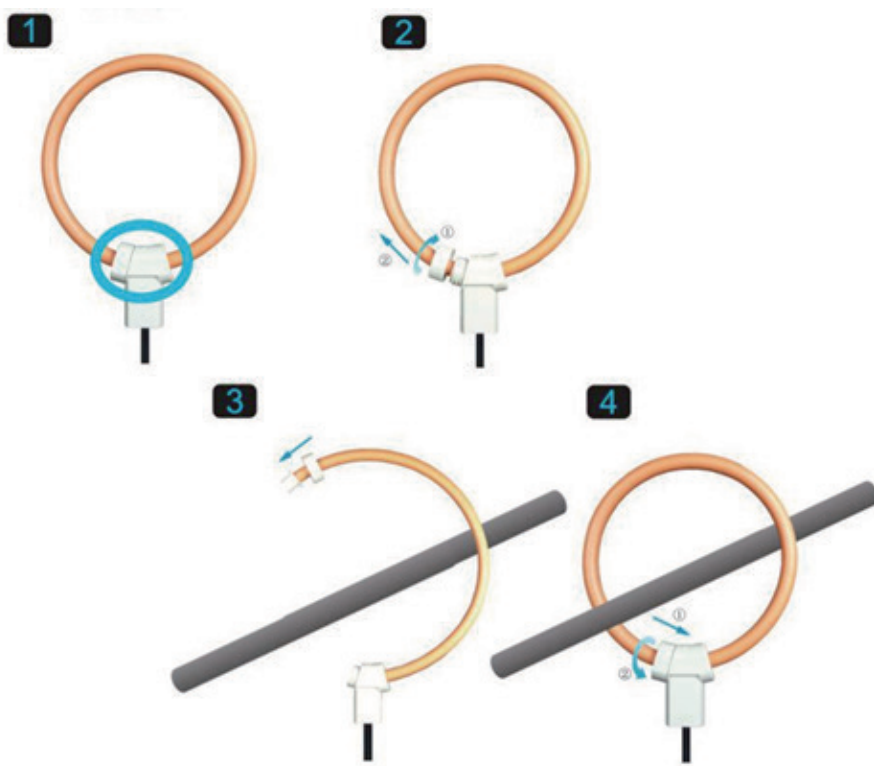


## HOW to USE

TYPE1



TYPE2



### NAFTEX INTERNACIONAL S. R. L.

Erik Ekman 29, Arroyo Hondo  
Santo Domingo, Dominican Republic  
+1 809 563 4239 [info@naftexdr.com](mailto:info@naftexdr.com)  
[www.naftexdr.com](http://www.naftexdr.com)

