

# XMI Series

## Telecom Inverter

1kVA-3kVA



### Intelligent Flexibility

- LiFePO4/Lead-acid battery compatible
- 19" Rackmount, support wall-mounted and embedded installation
- 150% DC oversizing, supports non-linear devices
- AC 220V and DC 48V output may be used simultaneously
- Cold start function



### High Reliability

- Input PF  $\geq 0.99$
- Intelligent fan allows multiple modes to control the speed
- Battery mode efficiency  $\geq 90\%$  at full load
- Mains power mode efficiency  $\geq 99\%$



### Green Performance

- The battery power-off voltage is configurable
- Multiple protection: undervoltage, overload, overheat, short circuit, surge, etc.
- Unmanned function



### Intelligent Monitoring System

- Supports RS485 and dry contact

Applications: Indoor distribution system, remote radio unit, ubiquitous coverage, landline network



# Specification

| Model                                 | XMI10HR-X   | XMI20HR-X  | XMI30HR-X |
|---------------------------------------|---|--|-----------|
| Capacity                              | 1kVA  | 2kVA   | 3kVA      |
| <b>Input</b>                          |   |  |           |
| AC Voltage                            | 176-250VAC (configurable)                             |  |           |
| Frequency                             | 50Hz ± 5%   |  |           |
| Power Factor                          | ≥0.99   |  |           |
| Rated Voltage                         | 48VDC   |  |           |
| Battery Voltage Range                 | 43~60VDC  |  |           |
| <b>AC Output</b>                      |   |  |           |
| Power Factor                          | 0.8   |  |           |
| Voltage                               | 220VAC ± 2% (Inverter mode)                           |  |           |
| Efficiency                            | ≥90% (Inverter mode)                                  |  |           |
| Frequency                             | 49~51Hz   |  |           |
| Waveform                              | Pure sine wave (Inverter mode)                        |  |           |
| THDu                                  | ≤3% (Linear load under full load)                     |  |           |
| Overload                              | 125% rated load 10 min; 150% rated load 1 min         |  |           |
| Switching Time                        | ≤10ms   |  |           |
| <b>DC Output</b>                      |   |  |           |
| Voltage                               | 54.5~57.6VDC  |  |           |
| Current                               | Optional rectifier module: 0A/6A/30A(6A charging)/30A | Optional rectifier module: 0A/6A/10A/30A(6A charging)/30A                |           |
| <b>Protection</b>                     |   |  |           |
| Bypass-Inverter                       | Low-Voltage Switching Point                           | 176 ± 3Vac   |           |
|                                       | High-Voltage Switching Point                          | 265 ± 3Vac   |           |
| Inverter-Bypass                       | Low-Voltage Recovery Point                            | 186 ± 3Vac   |           |
|                                       | High-Voltage Recovery Point                           | 255 ± 3Vac   |           |
| Battery low-voltage warning point     |   | 43 ± 0.5Vdc  |           |
| Battery undervoltage protection point |   | ≤40Vdc   |           |
| Battery overvoltage protection point  |   | ≥60Vdc   |           |
| Battery overvoltage recovery point    |   | ≥55Vdc   |           |
| Output overcurrent protection         |   | 100%~125%:protection after 10 mins                                       |           |
|                                       |   | 125%~150%: protection after 1 min  |           |
|                                       |   | >150%: instant protection  |           |
| Output shortcircuit protection        |   | Yes (short circuit is prohibited when grid power is connected)           |           |
| Battery reverse protection            |   | Yes (models with charging function prohibit reverse polarity connection) |           |
| Overheat protection                   |   | Yes (automatic recovery after fault condition is cleared)                |           |
| Cooling method                        |   | Built-in fan cooling (intelligent speed control)                         |           |
| <b>System</b>                         |   |  |           |
| Display                               |   | LCD, LED (optional)  |           |
| Communication                         |   | RS485, dry contact   |           |
| <b>Physical</b>                       |   |  |           |
| WxDxH(mm)                             |   | 482 × 350 × 44   |           |
| Weight(kg)                            |   | 6.2  |           |

\* Specifications subject to change without notice.



# XMI-HR Series

## Telecom Inverter

1kVA-15kVA



### Intelligent Flexibility

- N+X redundant parallel technology
- Masterless current sharing allows high-precision load sharing
- Direct use of DC system



### High Reliability

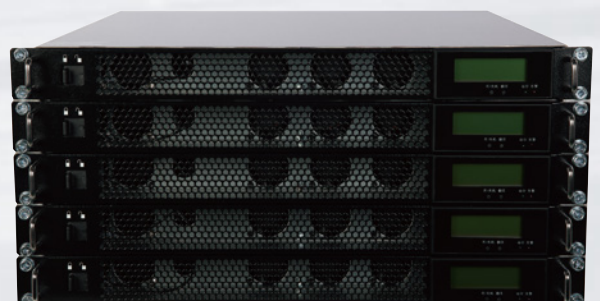
- Noise suppression technology
- Online structure design
- Relay + SCR compensation and flashover protection
- AC and DC double loop input design



### Intelligent Monitoring System

- Supports RS485/RS232 interface and SNMP(optional)

Applications: Indoor distribution system, network optimization, remote radio unit, railway, post and telecommunications, public security organs and other private network computer room systems



# Specification

| Model  | XMI30HR                             | XMI60HR | XMI90HR | XMI120HR        | XMI150HR |    |     |    |     |    |
|--|-------------------------------------|---------|---------|-----------------|----------|----|-----|----|-----|----|
| Capacity   | 3kVA                                | 6kVA    | 9kVA    | 12kVA           | 15kVA    |    |     |    |     |    |
| <b>Input</b>   |                                     |         |         |                 |          |    |     |    |     |    |
| AC Voltage   | 165~260VAC                          |         |         |                 |          |    |     |    |     |    |
| Frequency  | 50Hz+ 5%                            |         |         |                 |          |    |     |    |     |    |
| DC Voltage   | 48VDC                               |         |         |                 |          |    |     |    |     |    |
| Reflected Wide-Band Noise Current                          | <10%                                |         |         |                 |          |    |     |    |     |    |
| Reflected Relative Psophometrically Weighted Noise Current | <2%                                 |         |         |                 |          |    |     |    |     |    |
| <b>Output</b>  |                                     |         |         |                 |          |    |     |    |     |    |
| Voltage  | Single phase 220VAC                 |         |         |                 |          |    |     |    |     |    |
| Frequency  | 49~51Hz                             |         |         |                 |          |    |     |    |     |    |
| Voltage Accuracy   | ±1% (Inverter mode)                 |         |         |                 |          |    |     |    |     |    |
| Efficiency (Inverter Mode)                                 | >90%                                |         |         |                 |          |    |     |    |     |    |
| THDu   | <3% (Linear load under full load)   |         |         |                 |          |    |     |    |     |    |
| Dynamic Response   | ±3% (100% Load change)              |         |         |                 |          |    |     |    |     |    |
| Power Factor   | 0.8                                 |         |         |                 |          |    |     |    |     |    |
| <b>Battery</b>   |                                     |         |         |                 |          |    |     |    |     |    |
| Voltage  | 48V                                 |         |         |                 |          |    |     |    |     |    |
| Charging Current   | 6A                                  | 0A      | 12A     | 0A              | 18A      | 0A | 24A | 0A | 30A | 0A |
| <b>System</b>  |                                     |         |         |                 |          |    |     |    |     |    |
| Noise  | <55dB @ 1m                          |         |         |                 |          |    |     |    |     |    |
| Display  | LCD                                 |         |         |                 |          |    |     |    |     |    |
| Alarm  | Support                             |         |         |                 |          |    |     |    |     |    |
| Communication  | RS485, dry contact, SNMP (optional) |         |         |                 |          |    |     |    |     |    |
| <b>Protection</b>  |                                     |         |         |                 |          |    |     |    |     |    |
| Short Circuit  | Support                             |         |         |                 |          |    |     |    |     |    |
| Overheat   | Support                             |         |         |                 |          |    |     |    |     |    |
| Input Overvoltage  | Support                             |         |         |                 |          |    |     |    |     |    |
| Output Overvoltage   | Support                             |         |         |                 |          |    |     |    |     |    |
| <b>Environment</b>   |                                     |         |         |                 |          |    |     |    |     |    |
| Operating Temperature                                      | 0~40°C                              |         |         |                 |          |    |     |    |     |    |
| Humidity   | 0~95% (Non-condensing)              |         |         |                 |          |    |     |    |     |    |
| <b>Physical</b>  |                                     |         |         |                 |          |    |     |    |     |    |
| Structure  | Rack                                |         |         |                 |          |    |     |    |     |    |
| WxDxH(mm)  | 482 × 470 × 88                      |         |         | 482 × 470 × 220 |          |    |     |    |     |    |
| Weight(kg)   | 11                                  | 17      | 27      | 33              | 39       |    |     |    |     |    |

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# E48 Series

30A-1000A



## High Reliability

- Wide input range, appropriate for harsh environment
- BMS: LVLD+LVBD functions, temperature compensation, automatic floating charging control, AVR, battery capacity calculation, online battery testing, etc
- Advanced CPU and multiple microprocessor control technology



## Excellent Design

- Non-destructive hot-swappable technology:  $\leq 1$  min replacement time
- LiFePO4/Lead-acid battery compatible
- Digital-control active power factor compensation technology: input power factor is up to 0.99



## Perfect Protection

- Multiple protection: undervoltage, overload, overheat, short circuit, surge, lightning, fan fault alarm, fault display, historical alarm record storage, etc.

Applications: Base stations, small and medium size switching centers, wave network communications, satellite communications, data centers, etc.



# Specification

| Category                | Parameter   | Description  |                                |
|-------------------------|---|--|--------------------------------|
| AC input                | Voltage range   | 380Vac(260Vac~520Vac)  |                                |
|                         | Module start-up voltage range   | Start up: 140 ~290 Vac   |                                |
|                         | Module working voltage range  | Working: 90~290 Vac  |                                |
|                         | Frequency range   | 43Hz~67Hz  |                                |
|                         | Input method  | Three-phase five-wire system (optional dual three-phase manual switching)  |                                |
|                         | Lightning protection  | L-N,N-E, 8/20 $\mu$ s, In=20kA   |                                |
|                         | Power factor  | $\geq$ 0.99 (full load)  |                                |
|                         | THD   | $\leq$ 5% (rated input)  |                                |
|                         | Dual AC input selection   | Prioritized automatically route 1, with the option to force-select route 2 |                                |
| AC input                | Nominal voltage   | -48Vdc   |                                |
|                         | Rated voltage   | -53.5Vdc   |                                |
|                         | Voltage range   | Continuously adjustable from -43Vdc to -58Vdc                              |                                |
|                         | Power factor  | $\geq$ 0.99 (rated input)  |                                |
|                         | Efficiency  | $\geq$ 95% (rated input)   |                                |
|                         | Output wave and noise   | $\leq$ 200mVp-P  |                                |
|                         | Power-on output delay   | 3-8S   |                                |
|                         | Output voltage stability accuracy   | $\leq$ $\pm$ 1%  |                                |
|                         | Wideband noise voltage  |  | $\leq$ 100mV(3.4~150 KHz)      |
|                         |   |  | $\leq$ 30mV(150~30 MHz)        |
|                         | Telephone balance noise voltage   | $\leq$ 2mV   |                                |
|                         | Overshoot   | Overshoot  | $\Delta$ V: $\leq$ 5%Vo        |
|                         |   | Recovery time  | $\Delta$ t: $\leq$ 500 $\mu$ S |
|                         | Current sharing imbalance   | $\leq$ 5%  |                                |
|                         | Temperature coefficient   | $\pm$ 0.02%/ $^{\circ}$ C  |                                |
| System efficiency       | $\geq$ 95%  |  |                                |
| Shunt loading           | No detachment: fuse 400A*4+250A*4+100A*4, switch 63A*4+32A*4<br>Predetachment: fuse 400A*4+250A*2+63A*2<br>Afterdetachment: fuse 250A*2+100A*4+switch 63A*2+32A*4   |  |                                |
| Battery connection      | 1000A*2   |  |                                |
| Environment temperature | Working temperature range   | -5 $^{\circ}$ C~40 $^{\circ}$ C  |                                |
|                         | Storage temperature range   | -40 $^{\circ}$ C~+70 $^{\circ}$ C  |                                |
|                         | Working relative range  | $\leq$ 90%   |                                |
|                         | Storage temperature range   | $\leq$ 95%   |                                |
|                         | Altitude  | $\leq$ 3000m, derated over 3000m   |                                |
| Mechanic parameters     | WxDxH(mm)   | 2000 X 600 X 600   |                                |
|                         | Weight(kg)  | 130  |                                |
|                         | Wiring method   | Both up and bottom in  |                                |
| Monitor function        | System operation real-time monitoring; intelligent battery management; two-level power-down; remote monitoring, control and communication; RS485/232/IP network communication; fault alarm; peak shaving of utility power; off-peak usage; sleep mode |  |                                |
| Alarm & protection      | Module input overvoltage protection   | $\geq$ 300 Vac   |                                |
|                         | Module input undervoltage protection  | $\leq$ 85 Vac  |                                |
|                         | Primary power-down protection   | -46.0V $\pm$ 0.5V  |                                |
|                         | Secondary power-down protection   | -43.2V $\pm$ 0.5V  |                                |

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