



# MODULAR POWER

## 10kVA - 300KVA

Three Phase :Three phase  
Module 10/15/20/25/30kVA (2U)



TELE-COMMUNICATIONS DEVICES



LOCAL AREA NETWORKS (LAN)



E-BUSINESS (Servers Farms, ISP/ASP/POP)



SERVERS



CASH REGISTERS



EMERGENCY SECURITY



ELECTRO-MEDICAL DEVICES

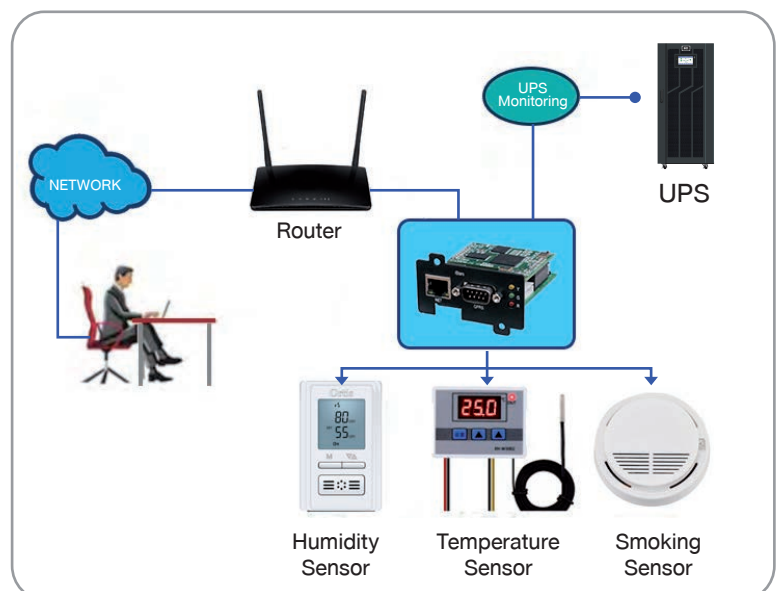
## Highlights

- Modular design, power module, bypass module, monitoring unit are hot-swappable
- High input/ Output power factor= 1 (input 0.999)
- Wide input voltage range(138~485Vac)
- On-line double conversion with DSP control design
- 3-Level inverter, IGBT PFC, high efficiency is up to 95.8%
- Support connecting to unbalance load
- Support maximum 6 units in parallel
- Intelligent fan speed regulation
- No derating for PF>= 0.5 inductive load and capacitive load
- Battery number 30-50pcs settable
- Common Battery Bank
- LBS function, compliance class A requirement
- Loop parallel signal control system , avoid any single failure
- Flexible Dual & Separate input source configuration
- Multiple communication interface : RS232, RS485, BMS, Parallel, LBS, Dry contact port, Relay card (optional), SNMP card(optional), Battery temperature sensor(optional)
- High power density design, requirement smaller footprint space
- Structured design easy for maintenance



TIS.1291 Part 1-2553  
TIS.1291 Part 2-2553  
TIS.1291 Part 3-2555

## Intelligent SMNP Monitoring



Your choice of power protection

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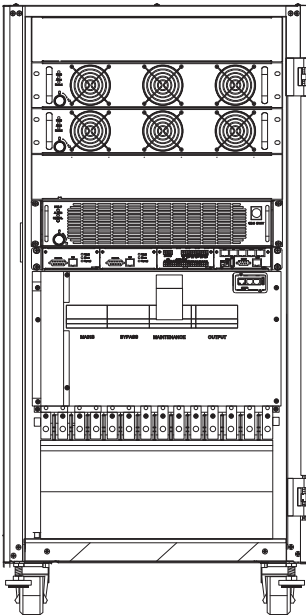


EMERGENCY  
SECURITY

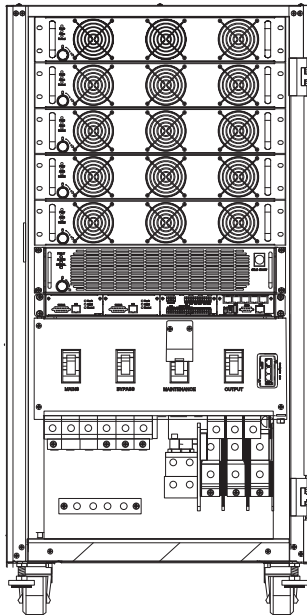


ELECTRO-  
MEDICAL  
DEVICES

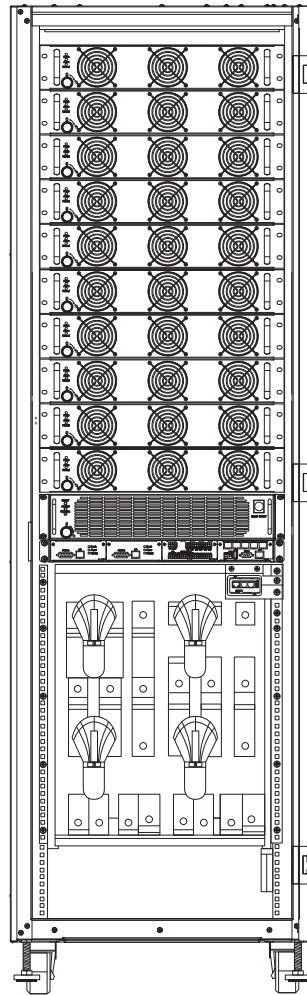
Model 60kVA



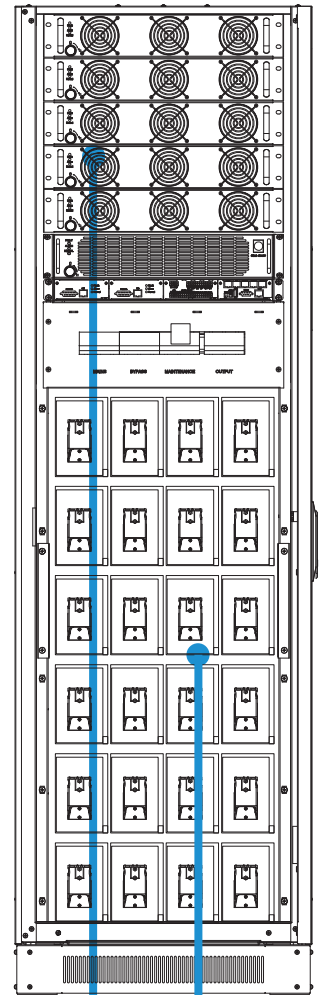
Model 150kVA



Model 300kVA

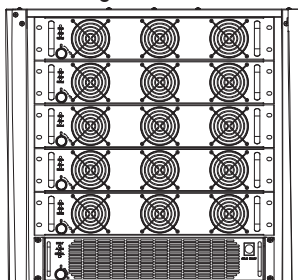


Model CBC150kVA



### Recommended amount of Power Module(PM) for CBC

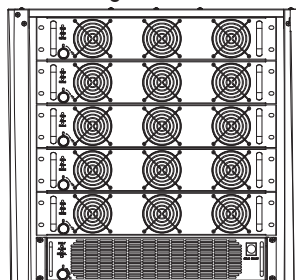
Design PM 10kVA



10kVA  
10kVA  
10kVA  
10kVA  
10kVA  
(redundant)

PM 10kVA x 5 or 4 + 1(redundant)

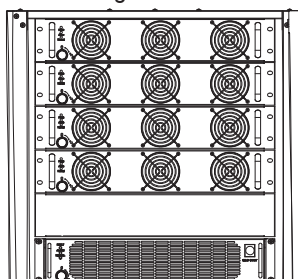
Design PM 15kVA



10kVA  
15kVA  
15kVA  
15kVA  
15kVA  
(redundant)

PM 15kVA x 4 or 4 + 1(redundant)

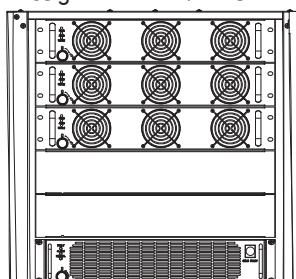
Design PM 20kVA



20kVA  
20kVA  
20kVA  
20kVA  
(redundant)

PM 20kVA x 3 or 3 + 1(redundant)

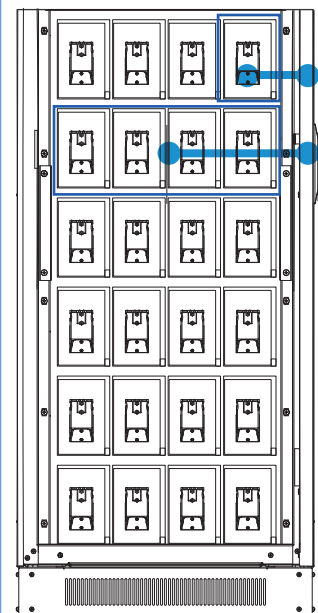
Design PM 25kVA/PM 30kVA



25/30kVA  
25/30kVA  
25/30kVA  
(redundant)

(PM 20kVA/PM 30kVA) x 2 or 2 + 1(redundant)

### Battery Module



1 Slot

1 String

1 Slot = Battery 12V 9Ah x 10ea

1 String = 4 Slots (Battery 40ea)

Up to 6 String (Battery 240ea)

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## 10kVA - 300KVA

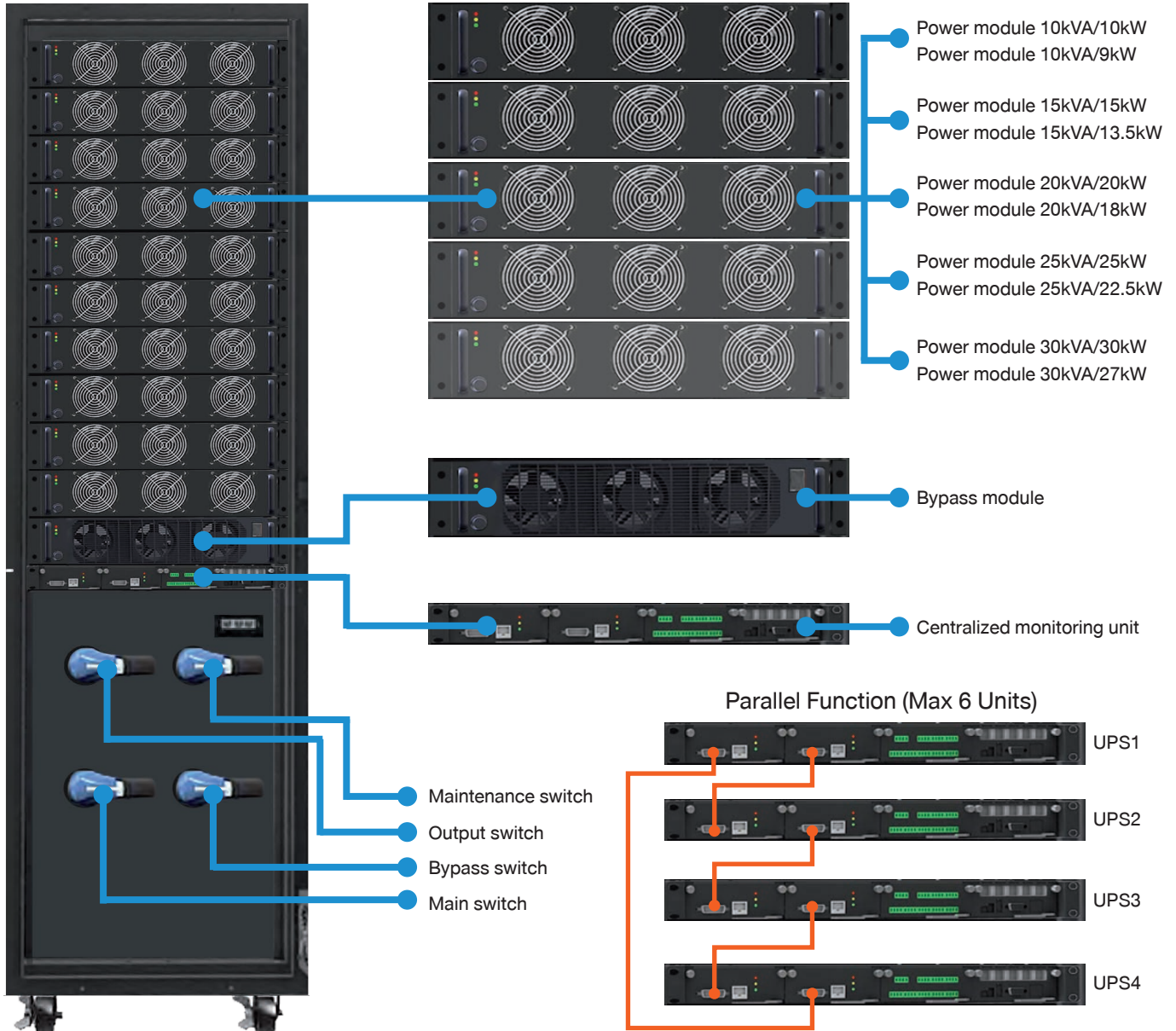
Three Phase :Three phase

Module 10/15/20/25/30kVA (2U)

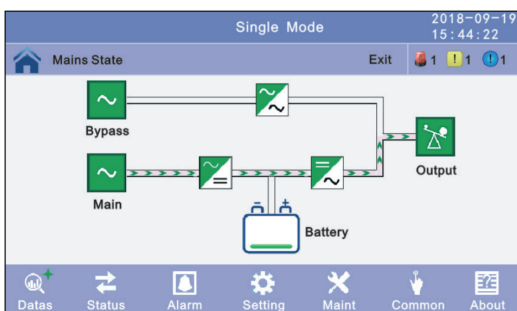


HPM3330E-300kVA

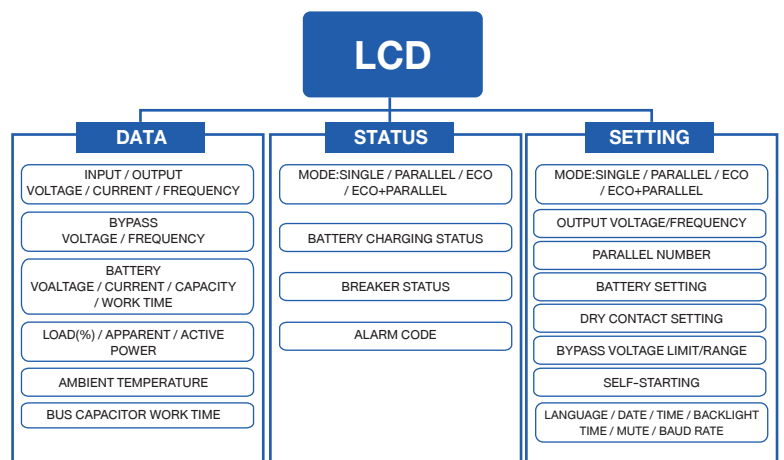
Flexible Modular Design (2U) (Depend on Customer)



## LCD Display Panel



(7"/10.4" Touch screen LCD)



Your choice of power protection



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| Cabinet (30 kVA module)             |             | HPM3330E-60kVA      | HPM3330E-150kVA     | HPM3330E-300kVA     |
|-------------------------------------|-------------|---------------------|---------------------|---------------------|
| Capacity<br>(VA/Watts)              | UPS cabinet | 30k~60k / 30k~60k   | 30k~150k / 30k~150k | 30k~300k / 30k~300k |
|                                     | Module      |                     | HPM3330E-RM / 30k   |                     |
|                                     | Max. Number | 2+1 / 2+2(optional) | 5 / 4               | 10 / 9              |
| Cabinet (25 kVA module)             |             | HPM3325E-50kVA      | HPM3325E-125kVA     | HPM3325E-250kVA     |
| Capacity<br>(VA/Watts)              | UPS cabinet | 25k~50k / 25k~50k   | 25k~125k / 25k~125k | 25k~250k / 25k~250k |
|                                     | Module      |                     | HPM3325E-RM / 25k   |                     |
|                                     | Max. Number | 2+1 / 2+2(optional) | 5 / 4               | 10 / 9              |
| Cabinet (20 kVA module)             |             | HPM3320E-60kVA      | HPM3320E-100kVA     | HPM3320E-200kVA     |
| Capacity<br>(VA/Watts)              | UPS cabinet | 20k~60k / 20k~60k   | 20k~100k / 20k~100k | 10k~200k / 10k~200k |
|                                     | Module      |                     | HPM3320E-RM / 20k   |                     |
|                                     | Max. Number | 3 / 3+1(optional)   | 5 / 4               | 10 / 9              |
| Cabinet (15 kVA module)             |             | HPM3315E-45kVA      | HPM3315E-75kVA      | HPM3315E-150kVA     |
| Capacity<br>(VA/Watts)              | UPS cabinet | 15k~45k / 15k~45k   | 15k~75k / 15k~75k   | 10k~150k / 10k~150k |
|                                     | Module      |                     | HPM3315E-RM / 15k   |                     |
|                                     | Max. Number | 3 / 3+1(optional)   | 5 / 4               | 10 / 9              |
| Cabinet (10 kVA module)             |             | HPM3310E-30kVA      | HPM3310E-50kVA      | HPM3310E-100kVA     |
| Capacity<br>(VA/Watts)              | UPS cabinet | 10k~30k / 10k~30k   | 10k~50k / 10k~50k   | 10k~100k / 10k~100k |
|                                     | Module      |                     | HPM3310E-RM / 10k   |                     |
|                                     | Max. Number | 3 / 3+1(optional)   | 5 / 4               | 10 / 9              |
| Redundancy Bypass module (optional) |             | Yes / NA            | NA / Yes            |                     |

| INPUT                      |  | 380/400/415Vac, (3Ph+N+PE)                                                                                       |  |  |
|----------------------------|--|------------------------------------------------------------------------------------------------------------------|--|--|
| Nominal voltage            |  | 138~305Vac for 40% Load; 305~485Vac for 100% Load;                                                               |  |  |
| Operating voltage range    |  | 40Hz~70Hz                                                                                                        |  |  |
| Operating frequency range  |  | 0.99                                                                                                             |  |  |
| Power factor               |  | 3% (100% linear load)                                                                                            |  |  |
| Harmonic distortion (THDi) |  | Max. voltage: 220V: +25%(optional+10%, +15%, +20% ); 230V: +20%(optional +10%, +15% ); 240V: +15%(optional +10%) |  |  |
| Bypass voltage range       |  | Min. voltage: -45% (optional-10%, -20%, -30%)                                                                    |  |  |
| Bypass Frequency range     |  | Frequency protection range: 10%                                                                                  |  |  |
| Generator input            |  | Support                                                                                                          |  |  |
| OUTPUT                     |  | 380/400/415Vac, (3Ph+N+PE)                                                                                       |  |  |
| Rated voltage              |  | 1.0                                                                                                              |  |  |
| Power factor               |  | 1%                                                                                                               |  |  |
| Voltage regulation         |  | synchronize with input, when the input frequency >10% (1%/2%/3%/4%/5% optional), output 50/60(0.1Hz)             |  |  |
| Output frequency           |  | (50/600.1%)Hz                                                                                                    |  |  |
| Line Mode                  |  | 3:1                                                                                                              |  |  |
| Bat. Mode                  |  | 2% with linear load; 4% with nonlinear load                                                                      |  |  |
| Crest factor               |  | UP to 95.8%                                                                                                      |  |  |
| Harmonic distortion (THD)  |  |                                                                                                                  |  |  |
| Efficiency                 |  |                                                                                                                  |  |  |

| BATTERY |  | Optional Voltage: 180/192/204/216/228/240/252/264/276/288/300Vdc(30/32/34/36/38/40/42/44/46/48/50pcs optional); 360Vdc~600Vdc (30~50 pcs, 30 pcs default, 36~50 pcs no power derating; 32~34 pcs output power factor 0.9; 30 pcs output power factor 0.8;) |  |  |
|---------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|---------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|

|                                 |  |            |         |           |
|---------------------------------|--|------------|---------|-----------|
| Battery voltage                 |  |            |         |           |
| Power module Charge Current     |  | 18A (Max.) |         |           |
| UPS cabinet Max. Charge Current |  | 54A/72A    | 90A/72A | 180A/162A |

| SYSTEM FEATURES            |             | Utility to Battery : 0ms; Utility to bypass: 0ms                                                                        |  |  |
|----------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------|--|--|
| Transfer time              | Line Mode   | 110%, 60min; 125%, 10min; 150%, 1min; to bypass: >150% Shut down Immediately.                                           |  |  |
|                            | Bypass Mode | 135% overload for long term; >1000% overload for 100 ms                                                                 |  |  |
| Overheat                   |             | Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately                                                     |  |  |
| Low battery voltage        |             | Alarm and Switch off                                                                                                    |  |  |
| Self-diagnostics           |             | Upon Power On and Software Control                                                                                      |  |  |
| Backfeed protection        |             | Support                                                                                                                 |  |  |
| EPO(optional)              |             | Shut down UPS immediately                                                                                               |  |  |
| Battery                    |             | Advanced Battery Management                                                                                             |  |  |
| Noise suppression          |             | Complies with EN62040-3                                                                                                 |  |  |
| Audible & Visual alarms    |             | Line Failure, Battery Low, Overload, System Fault                                                                       |  |  |
| Status LED & LCD display   |             | Line Mode, Bypass Mode, Battery Low, Battery Fault, Overload & UPS Fault                                                |  |  |
| Reading on the LCD display |             | Input, Output, Battery, Command, Setting, Maintenance                                                                   |  |  |
| Communication interface    |             | CAN, RS485, Parallel, Dry contact port, Relay card(optional), SNMP card(optional), Battery temperature sensor(optional) |  |  |

| ENVIRONMENTAL            |  | 0°C ~ 40°C               |  |  |
|--------------------------|--|--------------------------|--|--|
| Operating temperature    |  | -25°C ~ 55°C             |  |  |
| Storage temperature      |  | 0 ~ 95% (non condensing) |  |  |
| Humidity range           |  | < 1500m                  |  |  |
| Altitude                 |  | < 61dB                   |  |  |
| Noise level(1M distance) |  | < 68dB                   |  |  |

| PHYSICAL                |              | 600×850×1200            |           |           |
|-------------------------|--------------|-------------------------|-----------|-----------|
| Dimension<br>W×H×D (mm) | UPS cabinet  | 600×850×1200            |           |           |
|                         | Power module | 440×620×86 (2U)         |           |           |
| Net weight (kg)         | UPS cabinet  | 125 ~ 150               | 130 ~ 160 | 200 ~ 310 |
|                         | Power module | 10kVA: 19; 15-30kVA: 21 |           |           |
|                         |              |                         |           |           |

| STANDARDS |  | IEC/EN62040-1, IEC/EN60950-1                                                                      |  |  |
|-----------|--|---------------------------------------------------------------------------------------------------|--|--|
| Safety    |  | IEC/EN62040-2, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8 |  |  |
| EMC       |  |                                                                                                   |  |  |

TIS.1291 Part 1-2553  
TIS.1291 Part 2-2553  
TIS.1291 Part 3-2553

- All specification subject to change without notice.
- Custom-made specification are acceptable.
- Manufactured by factory with ISO 9001, ISO 14001, OHSAS 18001, CE, STANDARD