

Magnizon Outdoor Telecom Unit

Product Description

MX65-500ADC IP65 based, 600*600*1200 (W x D x H), Outdoor 25KW, 48V-500Amp capacity Solar Power System Cabinet suitable for hybrid telecom setup, includes power distribution units, 2 cooling fans with 2pcs 300A, DC distribution system with AC and DC inputs for hybrid configuration, Generator auto start/Stop function and remote monitoring setup.



Applications

- Fiber optic network and data room
- Wireless communications
- Broad band and network access
- Telecom roadside cabinets
- Satellite communications ground stations
- BTS 4G/5G Base station
- Manufacturing industry

Key Feature

- Nominal AC input: 85Vac ~ 300Vac;
- Nominal Solar PV input voltage range: 55Vdc ~ 160Vdc
- Wide Working Temperature range: -40°C ~ +85°C;
- Active power factor correction: PF≥0.99;
- Fan speed control design;
- Output terminal with hot plug connector.
- High efficiency and highest power density (Typical: 93.7%, Maximum: 94.5%, 50W/in³ power density)

- Digitalized Control: Digitalized primary and secondary controls could realize excellent monitoring and regulation
- High Reliability Design: Fan front to back air flow with latest thermal solution and experienced electric synthetize ensure suitable working environment and high reliability
- Compact structure, high power density.
- Multi-energy power supply solution: Can be connected to solar energy, wind energy, utility power, DG to form different types of complementary power supply system.
- Energy-saving mode: Maximize energy saving, according to solar energy, wind energy priority, commercial power (DG) supplement, battery backup mode operation.
- MPPT function: the maximum power point tracking accuracy is more than 99.5%. Efficiency≥96%(solar mode).
- Battery management: Perfect battery management: guarantee the long life of the battery in the harsh grid environment.
- Modular design: MPPT Module, Rectifier modules are modular hot-swappable, Flexible configuration, easy expansion and maintenance.
- Protection degree: IP55, the high degree of protection cabinet and advanced temperature control design ensure reliable

MX65-500ADC

operation of the system in harsh outdoor environments.

- Monitor: Providing one RS232 port, dry contact and other communication ports for network flexibility; Enabling proximal end software upgrade and unattended
- Power statistic: Load electricity consumption, solar power, mains, DG, wind turbine generated energy
- Built-in multiple output shunt design meets more load demand and no of output feeders.
- Hot-Swappable modules, without injury, on-line maintenance, quick and easy repair.
- Power factor correction >0.99
- Comprehensive lightning protection design. B+C or C class options.
- Perfect battery management, improves the battery life, and keeps the battery good working condition.
- Built-in over current, over voltage, over temperature etc protections and alarms.
- Excellent EMC performance

Compliance standards

- ISO9001:2015, ISO14001:2015, RoHs, CE
- Electrical Safety: IEC60950/ UL60950, EN55022 Class B (emission)
- EMC: IEC61000-4-2/3/4/5/6, IEC61000-4-11
- Harmonics: IEC61000-3-2, IEC61000-3-3

Cabinet Configuration

CONFIGURATION	
System Capacity	-48V / 500 A
Solar module	9nos of 3000W
Rectifier	8nos of 3000W
AC input	1*63A/3P ,1*SPD
DC input (PV input)	9*63A/2P , 9*SPD
Output distribution	Priority load: 3 routes (1*16A, 1*32A, 1*63A) Non-priority load: 5 routes, (3*16A, 1*32A, 1*63A) System Capacity> 300A , according to customer requirements or company default.
Battery Fuse	2 * 600A FUSE
Efficiency	≥ 96%, pure light mode
Protection level	IP65
Dimensions	600mm×600mm×1200mm (W*D*H)

MX65-500ADC

Specifications

Parameters	Value
RECTIFIER	
Rated input voltage (3-Ph)	Line voltage 380/400/415VAC, 50/60Hz, 3-phase 5 line
Magnizon Model	R483000 (refer the detailed spec sheet**)
Input voltage range (1-Ph)	85VAC~290VAC
Frequency	45Hz~65Hz
Maximum input current	≤55A
PF	≥0.99
MPPT SOLAR MODULE	
Rated input voltage	68VDC
Control module model	MQ48D-MPPT
Magnizon Model	PM4860-MPPT
Input voltage range	58VDC-160VDC
Maximum input current	≤63A
OUTPUT	
voltage range	42VDC-58VDC
Rated voltage	54.0VDC
Current	0-60A/ module
Efficiency	≥ 89%, pure electric mode (R48-3200); ≥ 95%, pure electric mode (R48-3200E); ≥ 96%, pure light mode
ENVIRONMENT	
Operating temperature	-20°C~+55°C
Storage temperature	-40°C~+85°C
Relative humidity	5%RH~90%RH
Altitude	≤ 2000m (derating is necessary)

MX65-500ADC

Control Schematics

