

The Best Solution For the Next Generation,
Photovoltaic Energy!



Bitdameun Junction Box

Bitdameun Junction Box is designed to install and manage power lines consisting of PV array in an optimum state and monitor electricity in real time to ensure the stability of the photovoltaic power system. It is based on an elegant design which can be applied in urban and public places.

Heat Management

provides an environment optimized for photovoltaic power system, detects and emits heat with cooling plate tightly coupled to diode

Superior Weather Resistance

with highly weather resistant ASA, the product can be used for a long period of time and is perfect for use in outdoor casing as its color lasts for a long time

Improved Safety of Channel Monitoring System

4000V high voltage insulation with CT and improved safety with the monitoring system designed for low voltage (5V or lower)

Improved Fire Prevention

separate wires are laid for plus and minus without PVC duct to prevent creepage flashover, and heat-resistant glass fiber wire is used for the effective prevention of fires

Smart Error Detection

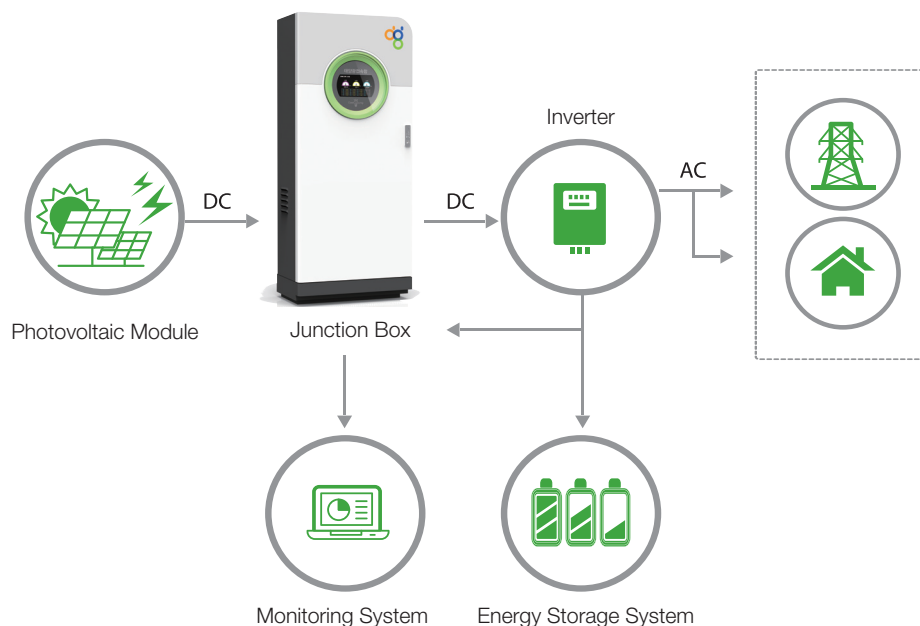
monitors each channel and display error messages on the window when a failure is detected in the system in order to make error detection and maintenance easier

Maximized effectiveness of photovoltaic power system, safety control, and optimized function and design



Bitdameun
Junction Box

■ Stand alone PV power system diagram



■ Advantages and Features

Safe Photovoltaic Power Generation

- DC 1000V power rating applied to all products
- LS Susol MCCB series applied to all products (100Af ~ 400Af)
- 15A photovoltaic fuse used (Bussman PV-15A 10F)
- Channel monitoring with hall sensor and RS485 monitoring software

High Durability

- IP65 rated stainless or steel boxes are used
- Triple-layer sealing and internal gasket are applied to the front side
- Safety cover is applied to components

Specially designed Bitdameun Junction Box

- Cooling plate integrated with fast diode used
- PVC duct one of the major causes of secondary fires not used
- Highly weather resistant design (durable glass and ASA are used for front side)
- Welcome function for energy saving
- Fast diode used to protect power channels and modules

■ Assembly Integrated

Box

- IP65 rated box is applied for ground mounted and floating photovoltaic system and coated with high-end double powder

RTU

- Integrated photovoltaic information transferred to monitoring system, and wire and wireless communication is available

Cooling Plate

- Custom-made cooling plate manufactured by extrusion molding
- Suppressing the temperature rise of diode
- Reducing power loss

Diode

- Fast diode which is 500 times faster than traditional diode
- Repetitive reverse voltage is completely blocked
- Blocking circulating current around each circuit in multiple parallel circuits

String Module

- Information for photovoltaic system including voltage and power for each channel can be measured in real time

Surge Protect Device

- Protects photovoltaic system from lightning and over voltage

DC Breaker

- 100, 160, 250 and 400ampere frames are used

Front Monitor

- Line connection can be checked in real time through TFT Color LCD

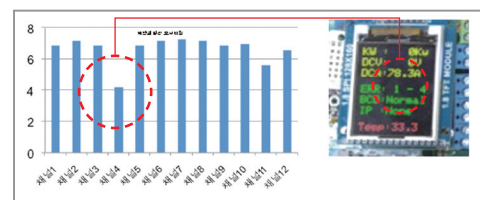
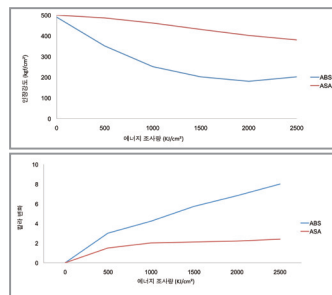
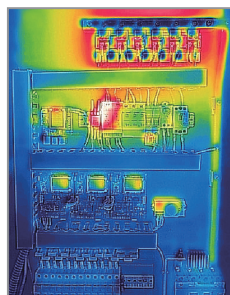
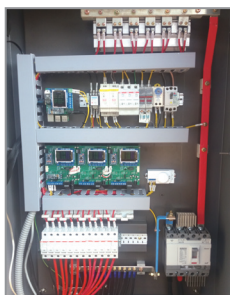
Fuse Holder

- Protects facilities from short circuit current overcurrent and available up to DC1000V

Environment Sensor

- Data of surrounding environmental elements (horizontal solar radiation, latitudinal solar radiation, module temperature and outside temperature) can be measured

■ Performance Test



Heat Management

Superior Weather Resistance

Smart Error Detection

Safe and reliable Bitdameun Junction Box of superior quality and performance for customer satisfaction

■ Specifications



DGMJ - ALL IP65

Web+Local+Channel Monitoring

- ~25 channel available
- Maximum input voltage 1000v
- Maximum output power 250A
- Monitoring: inverter + channel data
 - Channel: monitoring voltage and power errors in each channel
 - Local: TFT Color LCD is installed
 - Web: monitoring PV power system by using web
- SUS/ASA/durable glass applied
- Double powder coating
- Size: 600x300x1200
- Option: environmental sensor



DGMJ - Web IP65

Web Monitoring

- ~25 channel available
- Maximum input voltage 1000v
- Maximum output power 250A
- Monitoring: inverter data
 - Web: monitoring PV power system by using web
- SUS/ASA/durable glass applied
- Double powder coating
- Size: 600x300x1200
- Option: environmental sensor



DGMJ IP65

Standard Type

- ~25 channel available
- Maximum input voltage 1000v
- Maximum output power 250A
- SUS/ASA/durable glass applied
- Double powder coating
- Option: environmental sensor



DGME IP44

Economy Type

- ~28 channel available
- Maximum input voltage 1000v
- Maximum output power 300A
- SUS and STEEL used
- Double powder coating
- Size: 450~750x200x850~900