

## Product Information

### New “PV Series” Intelligent Power Modules for Solar Power Generation Systems



PM50B4L1C060/ PM50B5L1C060  
 PM50B6L1C060/ PM75B4L1C060  
 PM75B5L1C060/ PM75B6L1C060

90 mm × 50 mm dimensions help reduce size of photovoltaic inverters

### Summary

Series	Model	Specifications	Shipment date
New PV-IPM  *new package	PM50B4L1C060	600V/50A, 4 chips per package	May 2010
	PM50B5L1C060	600V/50A, 5 chips per package	
	PM50B6L1C060	600V/50A, 6 chips per package	
	PM75B4L1C060	600V/75A, 4 chips per package	
	PM75B5L1C060	600V/75A, 5 chips per package	
	PM75B6L1C060	600V/75A, 6 chips per package	

Demand for PV systems is increasing as a means to generate renewable energy to help prevent global warming. Inverters are an essential part of PV systems, converting DC electricity generated from solar cells into AC electricity for residential use. Because inverters for residential PV systems are usually installed indoors, it is important that they be made as small as possible.

### Features

#### ■ Smaller package helps miniaturize PV inverters

The mounting surface of the new IPM models is only 90 mm × 50 mm, about 30% less than that of Mitsubishi Electric’s current PV series IPMs launched in 2005. This compact package helps make PV inverters smaller.

#### ■ Three types of circuit connection and two types of rating current in the lineup

Mitsubishi Electric has prepared six models in the new PV series, to suit the various types of circuits in PV inverters, such as single output inverter, single output inverter with one chopper, as well as single output inverter with two choppers. The lineup consists of 4-chip, 5-chip and 6-chip modules, each with a choice of one of two types of current rating: 50 amperes (A) and 75A.

#### ■ Environmental consideration

The new PV Series is compliant with the RoHS (“Restriction of the use of certain Hazardous Substances” in electrical and electronic equipment) Directive.

## Overview

	PM50B4L1C060 PM50B5L1C060 PM50B6L1C060	PM75B4L1C060 PM75B5L1C060 PM75B6L1C060
Collector Current (A)	50A	75A
Collector-emitter Voltage (V)	600V	600V
Collector-emitter Saturation Voltage (V)	1.9	1.9
FWDi Forward Voltage (V)	1.7	1.7
Protection	Short circuit (SC) Under voltage (UV) Over temperature (OT)	

## Application

The power conditioner of a PV system for houses

The power conditioner of the fuel cell system

## Lineup and Module Size

	50A		75A	
	Previous series	New PV series	Previous series	New PV series
4-chip model	PM50B4LA060 PM50B4LB060	PM50B4L1C060	PM75B4LA060 PM75B4LB060	PM75B4L1C060
5-chip model	PM50B5LA060 PM50B5LB060	PM50B5L1C060	PM75B5LA060 PM75B5LB060	PM75B5L1C060
6-chip model	PM50B6LA060 PM50B6LB060	PM50B6L1C060	PM75B6LA060 PM75B6LB060	PM75B6L1C060
Module size (W × D)	120 mm × 55 mm	90 mm × 50 mm	120 mm × 55 mm	90 mm × 50 mm

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