# Power

# PDM16

MoTeC's 16 output Power Distribution Module (PDM16) is designed to provide electronically switched power to the various electrical systems in the vehicle such as motors, lights and solenoids, and electronic devices such as ECUs and data acquisition systems.

The module replaces conventional relays, fuses and circuit breakers, simplifying wiring and reducing weight while increasing reliability.

| Web | Item Number | Description |
|---|---|---|
| | M PDM16 | POWER DISTRIBUTION MODULE |

**Outputs**
8 x 20 A outputs—20 A continuous, 115 A transient (typical)
8 x 8 A outputs—8 A continuous, 60 A transient (typical)

**Inputs**
12 x Switch inputs

**Communications**
1 x CAN

**Diagnostic Information**
Output current and voltages
Input voltages
Error status

**Physical**
Connectors
1 x 26 pin Autosport connector
1 x 1 pin Autosport connector
1 x 8 pin Autosport connector
Case size 130 x 60 x 28 mm
Weight 300 grams

**General Features**
Each output is over-current, short circuit and thermal overload protected
Outputs programmable in 1 A steps
Outputs controllable via a combination of switch inputs, CAN messages and logic functions
Switch inputs ranging from 0 to 51 V, resolution 0.2 V
Performing up to 200 logic operations using operators like Flash, Pulse, Set/Reset, Hysteresis, Toggle, And, Or, Less than, Greater than, Not equal to, Equal to, True, False etc.
Performing functions such as flashing indicator lights and controlling thermofan and fuel pump
Using logic functions to selectively turn off systems during low battery voltage or engine starting, reducing drain on the battery
Providing full diagnostic information, including output currents and voltages, input voltages, and error status
Transmitting diagnostic information via CAN to a display or data logging device or monitoring directly on a PC

# PDM32

MoTeC's 32 output Power Distribution Module (PDM32) is designed to provide electronically switched power to the various electrical systems in the vehicle such as motors, lights and solenoids, and electronic devices such as ECUs and data acquisition systems.

The module replaces conventional relays, fuses and circuit breakers, simplifying wiring and reducing weight while increasing reliability.

| Web | Item Number | Description |
|---|---|---|
| | M PDM32 | POWER DISTRIBUTION MODULE |

**Outputs**
8 x 20 A outputs - 20 A continuous, 115 A transient (typical)
24 x 8 A outputs - 8 A continuous, 60 A transient (typical)

**Inputs**
23 x Switch inputs

**Communications**
1 x CAN

**Diagnostic Information**
Output current and voltages
Input voltages
Error status

**Physical**
Connectors
1 x 37 pin Autosport connector
1 x 26 pin Autosport connector
1 x 1 pin Autosport connector
1 x 8 pin Autosport connector
Case size 180 x 60 x 28 mm
Weight 405 grams

**General Features**
Each output is over-current, short circuit and thermal overload protected
Outputs programmable in 1 A steps
Outputs controllable via a combination of switch inputs, CAN messages and logic functions
Switch inputs ranging from 0 to 51 V, resolution 0.2 V
Performing up to 200 logic operations using operators like Flash, Pulse, Set/Reset, Hysteresis, Toggle, And, Or, Less than, Greater than, Not equal to, Equal to, True, False etc.
Performing functions such as flashing indicator lights and controlling thermofan and fuel pump
Using logic functions to selectively turn off systems during low battery voltage or engine starting, reducing drain on the battery
Providing full diagnostic information, including output currents and voltages, input voltages, and error status
Transmitting diagnostic information via CAN to a display or data logging device or monitoring directly on a PC

# PDM15

MoTeC's 15 output Power Distribution Module (PDM15) is designed to provide electronically switched power to the various electrical systems in the vehicle such as motors, lights and solenoids, and electronic devices such as ECUs and data acquisition systems.

The module replaces conventional relays, fuses and circuit breakers, simplifying wiring and reducing weight while increasing reliability.


| Web | Item Number | Description |
|---|---|---|
| | M PDM15 | POWER DISTRIBUTION MODULE |

**Outputs**
8 x 20 A outputs - 20 A continuous, 115 A transient (typical)
7 x 8 A outputs - 8 A continuous, 60 A transient (typical)

**Inputs**
16 x Switch inputs

**Communications**
1 x CAN

**Diagnostic Information**
Output current and voltages
Input voltages
Error status

**Physical**
Connectors
1 x 34 pin waterproof connector
1 x 26 pin waterproof connector
1 x M6 stud
Case size 108 x 128 x 39 mm
Weight 260 grams

**General Features**
Each output is over-current, short circuit and thermal overload protected
Outputs programmable in 1 A steps
Outputs controllable via a combination of switch inputs, CAN messages and logic functions
Switch inputs ranging from 0 to 51 V, resolution 0.2 V
Performing up to 200 logic operations using operators like Flash, Pulse, Set/Reset, Hysteresis, Toggle, And, Or, Less than, Greater than, Not equal to, Equal to, True, False etc.
Performing functions such as flashing indicator lights and controlling thermofan and fuel pump
Using logic functions to selectively turn off systems during low battery voltage or engine starting, reducing drain on the battery
Providing full diagnostic information, including output currents and voltages, input voltages, and error status
Transmitting diagnostic information via CAN to a display or data logging device or monitoring directly on a PC

# PDM30

MoTeC's 30 output Power Distribution Module (PDM30) is designed to provide electronically switched power to the various electrical systems in the vehicle such as motors, lights and solenoids, and electronic devices such as ECUs and data acquisition systems.

The module replaces conventional relays, fuses and circuit breakers, simplifying wiring and reducing weight, while increasing reliability.


| Web | Item Number | Description |
|---|---|---|
| | M PDM30 | POWER DISTRIBUTION MODULE |

**Outputs**
8 x 20 A outputs - 20 A continuous, 115 A transient (typical)
22 x 8 A outputs - 8 A continuous, 60 A transient (typical)

**Inputs**
16 x Switch inputs

**Communications**
1 x CAN

**Diagnostic Information**
Output current and voltages
Input voltages
Error status

**Physical**
Connectors
1 x 34 pin waterproof connector
1 x 26 pin waterproof connector
1 x M6 stud
Case size 108 x 128 x 39 mm
Weight 270 grams

**General Features**
Each output is over-current, short circuit and thermal overload protected
Outputs programmable in 1 A steps
Outputs controllable via a combination of switch inputs, CAN messages and logic functions
Switch inputs ranging from 0 to 51 V, resolution 0.2 V
Performing up to 200 logic operations using operators like Flash, Pulse, Set/Reset, Hysteresis, Toggle, And, Or, Less than, Greater than, Not equal to, Equal to, True, False etc.
Performing functions such as flashing indicator lights and controlling thermofan and fuel pump
Using logic functions to selectively turn off systems during low battery voltage or engine starting, reducing drain on the battery
Providing full diagnostic information, including output currents and voltages, input voltages, and error status
Transmitting diagnostic information via CAN to a display or data logging device or monitoring directly on a PC

# Dual Half Bridge (DHB)

The Dual Half Bridge (DHB) is a high current amplifier which allows low current auxiliary outputs to drive high current loads such as motors. It contains two high current half bridge outputs enabling it to drive a single motor in two directions, or drive two motors in a single direction. It is also capable of high speed PWM, which can be used for speed control of motors and for other purposes.

The DHB connects to any auxiliary output of a MoTeC ECU or Dash Logger, which performs the control function, such as PWM speed control, direction control or servo control.

The fully sealed case makes the DHB suitable for under bonnet mounting.


### Application Examples

- Servo motor e.g. active wing control, boat trim control, inlet runner length control, variable valve lift.
- Motor speed control e.g. electric water pump, thermo fan, fuel pump.
- Solenoid control.

| Web | Item Number | Description |
|---|---|---|
| | M DHB | DUAL HALF BRIDGE |

**Compatible with**
All MoTeC ECUs
All MoTeC Dash Loggers

**Basic Specifications**

**Electrical**
Output current
Continuous DC current 20 A (total)
Peak surge current 500 A
Max. operating frequency 50 kHz @ 28 V
Switching delay, typical
High to low 6.5 µsec
Low to high 6.5 µsec
Input threshold, typical
High 2.8 V
Low 2.1 V

**Operating voltage**
7.0 V to 55 V with under voltage lockout

**Physical**
Size 31.4 x 38.0 x 14.0 mm
Weight approximately 60 grams plus connectors
Connectors
Power: 2 pin DTP Male
Motor /Output: 2 pin DTP Female
Input: 2 pin DTM Male
Maximum case temperature 125 °C