# MICRO POWER CONTROLLER - HID

## FOR High Pressure Sodium /Mercury Vapor /Metal Halide

PSJ Power Controller can control energy consumption and reduce demand charge. With the new lighting control equipment technology, **N.C.W.I.** , lighting can be controlled in a range of 100% to 50 % of 100% to 60% for metal halide

## Benefits

- Save electricity expense more than 50 %
- Easy to control the intensity of lighting
- Extend lamp lifetime up to 100%
- Reduce demand charge
- Reduce air-condition consumption
- Easy to install and apply to the old system
- Save global energy with sustainable way
- Support global warming trend

## Example

| | |
|---|---|
| Lamp Type | Fluorescent / Mercury Vapor / High Pressure Sodium / Metal Halide |
| Quatity | 1 Lamp |
| Month | 12 Months |
| Working Day | 30 Days |
| Period | 12 Hours |
| Electronicity Cost | 3.3 THB/Unit |

| | FL 18W | FL 36W | MV 250W | HPS 400W | MH 1000W |
|---|---|---|---|---|---|
| Ballast Lost (W) | 11 | 11 | 30 | 55 | 80 |
| Electricity Usages (kW) | 0.029 | 0.047 | 0.28 | 0.455 | 1.08 |

| | Electricity Cost per Year (THB) | | | | |
|---|---|---|---|---|---|
| Power Usages (kW.Hr) 100% | 413.42 | 670.03 | 3,991.68 | 6,486.48 | 15,396.48 |
| Power Usages (kW.Hr) 80% | 330.74 | 536.03 | 3,193.34 | 5,189.18 | 12,317.18 |
| Power Usages (kW.Hr) 70% | 289.40 | 469.02 | 2,794.18 | 4,540.54 | 10,777.54 |
| Power Usages (kW.Hr) 60% | 248.05 | 402.02 | 2,395.01 | 3,891.89 | 9,237.89 |
| Power Usages (kW.Hr) 50% | 206.71 | 335.02 | 1,995.84 | 3,243.24 | 7,698.24 |

| | Saving per year (THB) | | | | |
|---|---|---|---|---|---|
| Power Usages (kW.Hr) 100% | - | - | - | - | - |
| Power Usages (kW.Hr) 80% | 82.68 | 134.01 | 798.34 | 1,297.30 | 3,079.30 |
| Power Usages (kW.Hr) 70% | 124.03 | 201.01 | 1,197.50 | 1,945.94 | 4,618.94 |
| Power Usages (kW.Hr) 60% | 165.37 | 268.01 | 1,596.67 | 2,594.59 | 6,158.59 |
| Power Usages (kW.Hr) 50% | 206.71 | 335.02 | 1,995.84 | 3,243.24 | 7,698.24 |

## Application

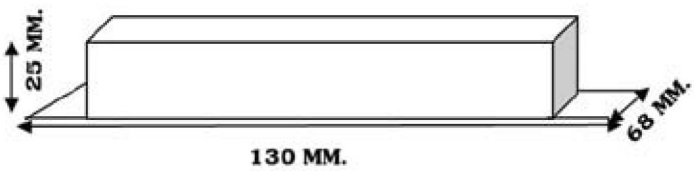
- Government or Non-Government Department
- Interior Design
- Lighting Design
- Highways and Express Ways
- Banking
- Industrial Segment and Factory
- Shop and Mall
- Hotel
- Hospital
- Office Building
- Warehouse
- Advertising Sign/Billboard

## Key Features

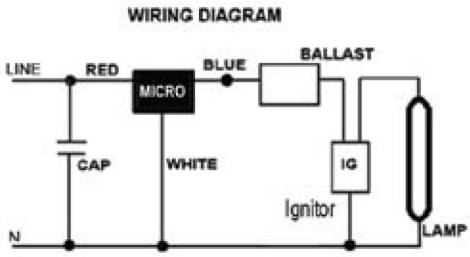
- 100% to 50% dimming for fluorescent, high pressure sodium, and mercury vapor 100% to 60% dimming for metal halide
- 5 Step programming memory set up
- Very low EMI & EMC
- Very low voltage harmonics distortion < 1.6%
- Operate with magnetic ballast
- More flexibility modes of control (analog and digital control)
- Rugged design compatible to solid state relay
- Up to 99% relative humidity
- Industrial Grade

| Model | Description | Weight (kg.) |
|---|---|---|
| PSJMC-250 | Micro Power Controller 250 Watts | 0.2 |
| PSJMC-400 | Micro Power Controller 400 Watts | 0.2 |
| PSJMC-250-RF | Wireless Micro Power Controller 250 Watts | 0.22 |
| PSJMC-400-RF | Wireless Micro Power Controller 400 Watts | 0.22 |

Dimension




Wiring Diagram




## Specification

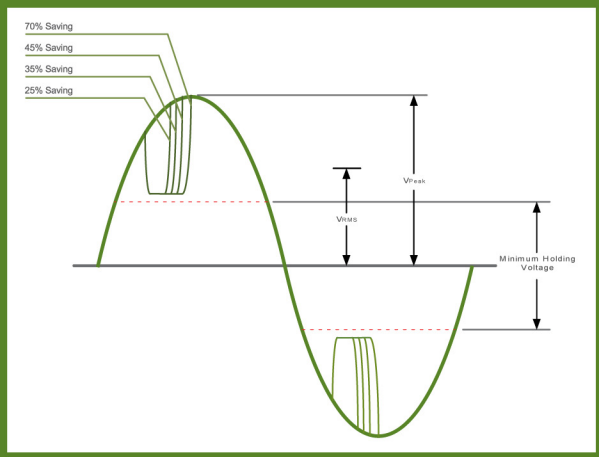
| | |
|---|---|
| Input Voltage: | 220VAC± 10% |
| Frequency : | 50 Hz± 1% |
| Power output : | 250 W to 400 W |
| Power Saving range : | 0% to 50% |
| Power Factor : | 0.45 |
| Ambient temp: | 0 to 85 °C |
| Humidity: | Up to 99% Relative humidity |
| Size: | (D) = 25 mm (H)= 130 mm (W)= 68 mm |

*Remark PSJMC-250-RF and PSJMC-400-RF are controlled by RF Frequency 433.92 MHZ

Information subject to change without notice

## Non Critical Wave Intersection

**N.C.W.I.** Technique is specifically designed for gas-discharge lamps with magnetic ballast to be able to control power supply to the lamp in order to manage the energy more efficiently where full power-to-load is not required. Additionally, low insertion loss makes it more competitive to other technologies.




Contact

www.psjenergysave.com

# PSJDSR
# PSJDSR-RF
## for micro power controller

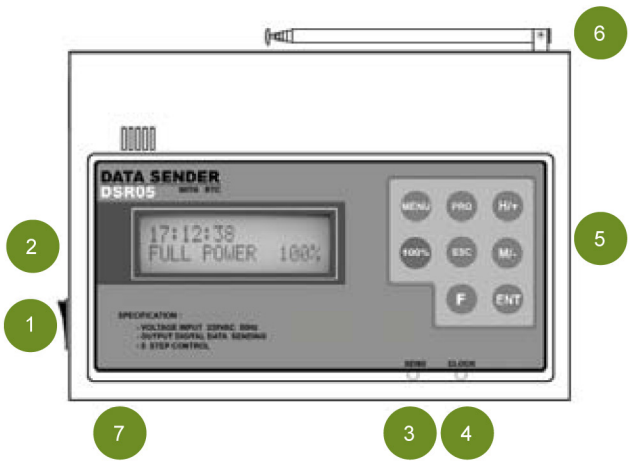
## WITH REAL TIME CLOCK

### SPECIFICATION:

-Voltage Input 220~240VAC 50Hz
-Frequency control 433.92MHz
-Power output 10mW
-Current Rating 45mA
-Build-in Real-time clock
-Step program 5 step
-Command control Range 20-60M
-Battery Backup 3 year

## Electrical Characteristics, T=25 C, Vcc=3.6V, Fre=433.92MHz:

| Characteristics | Sym. | Min. | Typ. | Max. | Uint. |
|---|---|---|---|---|---|
| Operating Frequency(+-300KHz) | VCC | | 433.92 | | MHz |
| Data Rate | Ask | | | 8K | Kbps |
| Transmitter Performance (OOK@2.4Kbps) | | | | | |
| Peak Input Current, 12 Vdc Supply | ITP | | | 45 | mA |
| Peak Input Power | PO | | 10 | | mW |
| Tum On / Tum Off Time | T ON / T OFF | | | 1 | US |
| Power Supply Voltage Range | VCC | 3 | | 12 | VDC |
| Operating Ambient Temperature | Ta | -20 | | +85 | Celsius |
| Tx Antenna Out (3V) +2.4dB | VCC | | | | mA |




1 . SW POWER ON/OFF
2 . LCD DISPLAY
3 . LED SEND DATA
4 . LED CLOCK
5 . KEY FUNCTION
6 . ANTTENA
7 . 220VAC INPUT

## COMMAND CONTROLLER