



## Features

- Universal AC input / up to 305VAC
- No load power consumption < 0.075W (<0.1W for IRM-05~20)
- Miniature size, high power density
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Isolation Class II
- Comply with EN55032 class B without any additional components
- Fully isolated plastic case
- High operating temperature up to +85°C
- Withstand 5G vibration test
- Low cost, high reliability
- Pass LPS
- 3 years warranty

## General Specification (Please refer to [www.meanwell.com](http://www.meanwell.com) for detail spec.)

Model No.	IRM-01-x[S]	IRM-02-x[S]	IRM-03-x[S]	IRM-05	IRM-10	IRM-15	IRM-20
AC input voltage range	85~305VAC						
Overload protection	>110%		105%~260%	115%~260%	115%~190%		115%~160%
Over voltage protection	115%~135% rated output voltage						
Withstand voltage	I/P-O/P: 3kVAC						
Working temperature	-30~+85°C			-30~+70°C (refer to output derating curve)			
Safety standards	IRM-01~20: UL62368-1, TUV BS EN/EN62368-1, EAC TP TC 004, BSMI CNS14336-1 approved; IRM-03(S): TUV BS EN/EN60335-1 approved; Design refer to IEC60601-1 for IRM-03						
EMC standards	BS EN/EN55032 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, EN55024, EAC TP TC 020						
Dimension (LxWxH)(mm)	PCB: 33.7x 22.2x 15 SMD: 33.7x 22.2x 16		PCB: 37x 24x 15 SMD: 37x 24x 16		45.7x 25.4x 21.5		52.4x 27.2x 24

## 1W IRM-01

Model No.	Output	Tol.	R&N	Effi.
IRM-01-3.3□	3.3V, 0~300mA	±2.5%	150mV	66%
IRM-01-5□	5V, 0~200mA	±2.5%	150mV	70%
IRM-01-9□	9V, 0~111mA	±2.5%	150mV	72%
IRM-01-12□	12V, 0~83mA	±2.5%	150mV	74%
IRM-01-15□	15V, 0~67mA	±2.5%	200mV	75%
IRM-01-24□	24V, 0~42mA	±2.5%	200mV	77%

□ = Blank, S ; Blank: PCB mounting style, S: SMD type

## 2W IRM-02

Model No.	Output	Tol.	R&N	Effi.
IRM-02-3.3□	3.3V, 0~600mA	±2.5%	150mV	66%
IRM-02-5□	5V, 0~400mA	±2.5%	150mV	70%
IRM-02-9□	9V, 0~222mA	±2.5%	150mV	72%
IRM-02-12□	12V, 0~167mA	±2.5%	150mV	74%
IRM-02-15□	15V, 0~133mA	±2.5%	200mV	75%
IRM-02-24□	24V, 0~83mA	±2.5%	200mV	77%

□ = Blank, S ; Blank: PCB mounting style, S: SMD type

## 3W IRM-03

Model No.	Output	Tol.	R&N	Effi.
IRM-03-3.3□	3.3V, 0~900mA	±2.5%	100mV	68%
IRM-03-5□	5V, 0~600mA	±2.5%	100mV	72%
IRM-03-9□	9V, 0~333mA	±2.5%	100mV	77%
IRM-03-12□	12V, 0~250mA	±2.5%	150mV	78%
IRM-03-15□	15V, 0~200mA	±2.5%	200mV	78%
IRM-03-24□	24V, 0~125mA	±2.5%	240mV	80%

□ = Blank, S ; Blank: PCB mounting style, S: SMD type

## 5W IRM-05

Model No.	Output	Tol.	R&N	Effi.
IRM-05-3.3	3.3V, 0~1.25A	±2.5%	200mV	68%
IRM-05-5	5V, 0~1A	±2.5%	200mV	71%
IRM-05-12	12V, 0~0.42A	±2.5%	200mV	75%
IRM-05-15	15V, 0~0.33A	±2.5%	200mV	75%
IRM-05-24	24V, 0~0.23A	±2.5%	200mV	77%

## 10W IRM-10

Model No.	Output	Tol.	R&N	Effi.
IRM-10-3.3	3.3V, 0~2.5A	±2.5%	200mV	74%
IRM-10-5	5V, 0~2A	±2.5%	200mV	77%
IRM-10-12	12V, 0~0.85A	±2.5%	200mV	82%
IRM-10-15	15V, 0~0.67A	±2.5%	200mV	82%
IRM-10-24	24V, 0~0.42A	±2.5%	200mV	82%

## 15W IRM-15

Model No.	Output	Tol.	R&N	Effi.
IRM-15-3.3	3.3V, 0~3.5A	±2.5%	200mV	74%
IRM-15-5	5V, 0~3A	±2.5%	200mV	78%
IRM-15-12	12V, 0~1.25A	±2.5%	200mV	82%
IRM-15-15	15V, 0~1A	±2.5%	200mV	82%
IRM-15-24	24V, 0~0.63A	±2.5%	200mV	83%

## 20W IRM-20

Model No.	Output	Tol.	R&N	Effi.
IRM-20-3.3	3.3V, 0~4.5A	±2.5%	200mV	76%
IRM-20-5	5V, 0~4A	±2.5%	200mV	79%
IRM-20-12	12V, 0~1.8A	±2.5%	200mV	84%
IRM-20-15	15V, 0~1.4A	±2.5%	200mV	84%
IRM-20-24	24V, 0~0.9A	±2.5%	200mV	85%



IRM-30



IRM-30-xST



IRM-45/60/90



IRM-45/60/90-xST

## Features

- Universal AC input up to 305VAC
- No load power consumption < 0.1W (<0.21W for IRM-90)
- Miniature size, high power density
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Isolation Class II
- Fully isolated plastic case
- Comply with EN55032 class B without any additional components
- High operating temperature up to +80°C
- Withstand 5G vibration test
- Low cost, high reliability
- Pass LPS (except for IRM-45/60 5V and IRM-90)
- Over voltage category III
- 3 years warranty

## General Specification (Please refer to [www.meanwell.com](http://www.meanwell.com) for detail spec.)



Model No.	IRM-30-x <sup>ST</sup>	IRM-45-x <sup>ST</sup>	IRM-60-x <sup>ST</sup>	IRM-90-x <sup>ST</sup>
AC input voltage range	85~305VAC			80~305VAC
AC inrush current (max.)	Cold start, 25A at 115VAC, 45A at 230VAC		Cold start, 30A at 115VAC, 60A at 230VAC	
Overload protection	105%~160%		115%~160%	
Over voltage protection	105%~135%			
Setup, rise, hold up time	1000ms, 30ms, 40ms at 230VAC		1000ms, 30ms, 50ms at 230VAC	
Leakage current	<0.25mA at 240VAC			<0.1mA at 240VAC
Withstand voltage	I/P-O/P: 4kVAC			I/P-O/P: 4kVAC
Working temperature	-30~+70°C (refer to output derating curve)			-30~+80°C
Vibration	10~500Hz, 5G 10min./1 cycle, period for 60 min. each along X, Y, Z axes			
Safety standards	UL62368-1, TUV BS EN/EN62368-1, EAC TP TC 004, EN60335-1 approved (IRM-90 by request); BSMI CNS14336-1 (except for IRM-90) approved			
EMC standards	BS EN/EN55032 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, EAC TP TC 020			
Connection	4 industrial pins			
Dimension (LxWxH)(mm)	PCB mounting: 69.5x 39x 24; Screw I/O: 91x 39.5x 28.5		PCB mounting: 87x 52x 29.5; Screw I/O: 109x 52x 33.5	

### 30W IRM-30

Model No.	Output	Tol.	R&N	Effi.
IRM-30-5□	5V, 0~6A	±2.5%	120mV	83%
IRM-30-12□	12V, 0~2.5A	±2.5%	150mV	88%
IRM-30-15□	15V, 0~2A	±2.5%	200mV	88%
IRM-30-24□	24V, 0~1.3A	±2.5%	240mV	88.5%
IRM-30-48□	48V, 0~0.63A	±2.5%	300mV	90%

□ = Blank, ST ; Blank: PCB mounting style, ST: Screw terminal style

### 60W IRM-60

Model No.	Output	Tol.	R&N	Effi.
IRM-60-5□	5V, 0~10A	±2.5%	80mV	84%
IRM-60-12□	12V, 0~5A	±2.5%	120mV	87.5%
IRM-60-15□	15V, 0~4A	±2.5%	120mV	89%
IRM-60-24□	24V, 0~2.5A	±2.5%	150mV	90%
IRM-60-48□	48V, 0~1.25A	±2.5%	240mV	91%

□ = Blank, ST ; Blank: PCB mounting style, ST: Screw terminal style

### 45W IRM-45

Model No.	Output	Tol.	R&N	Effi.
IRM-45-5□	5V, 0~8A	±2.5%	80mV	83.5%
IRM-45-12□	12V, 0~3.8A	±2.5%	150mV	87.5%
IRM-45-15□	15V, 0~3A	±2.5%	180mV	88.5%
IRM-45-24□	24V, 0~1.9A	±2.5%	200mV	89.5%
IRM-45-48□	48V, 0~0.94A	±2.5%	300mV	90.5%

□ = Blank, ST ; Blank: PCB mounting style, ST: Screw terminal style

### 90W **NEW** IRM-90

Model No.	Output	Tol.	R&N	Effi.
IRM-90-12□	12V, 0~6.7A	±2%	120mV	92%
IRM-90-15□	15V, 0~6.23A	±2%	150mV	92.5%
IRM-90-24□	24V, 0~3.75A	±2%	200mV	93%
IRM-90-48□	48V, 0~1.88A	±2%	240mV	93%

□ = Blank, ST ; Blank: PCB mounting style, ST: Screw terminal style