

1.1 Input Characteristics

AC input voltage rating	220Vac
AC input voltage range	210Vac – 230Vac
AC input frequency range	47Hz ~ 63Hz
Input current	0.55A
Input Power	60W
Power factor	0.5 Min
Efficiency	80% Min



1.2 Output Characteristics

Output Voltage	12.0V
Rated load current	4.5A
MAX load current	5.0A
Rated Output Power	54W
Min. load current	100mA
Output Tolerance	±8%
Ripple and Noise	

1.3 Performance Specifications

Line Regulation	±8%
Load Regulation	±8%

1.4 Protection Features

Over Current Protection	Output shut down with auto-recovery
Short Circuit Protection	Output shut down with auto-recovery
Over Voltage or Load Protection	Output shut down with auto-recovery
Over Temperature Protection	Output shut down with auto-recovery

1.5 Environments

Operating Temperature	-20°C to +50°C
Storage Temperature	-30°C to +70°C
Operating Humidity	20% to 90% R.H.
Storage Humidity	0% to 95% R.H.

1.6 Dielectric Withstand Voltage (Hi-Pot)

condition : non operating	
Test Point : primary to secondary	3.0KVac, 10mA, 3Sec

1.7 Insulation Resistance

condition : non operating	
Test Point : primary to secondary	Greater than 100MΩ at 500 VDC

*주의사항 : 이모델은 RGB,Controler,기타회로에 사용시 정상작동이 안될수있습니다

2 Performance Evaluation

This session presents the test results of SMPS module up to data. Results on inrush current and safety test are not included and will be added when they become available. Overall, the module meets design specifications.

2.1 Input Characteristics

2.1.1 Input current and Standby power

The module was tested at different input voltages (from 200Vac to 240Vac)

Standby power at min. load			
Input Voltage	210V/60Hz	220V/60Hz	230V/60Hz
Pin (mW)	2.50W	2.70W	3.00W
Input current at full load			
Input Voltage	210V/60Hz	220V/60Hz	230V/60Hz
Input Current (A)	495mA	489mA	484mA
Efficiency			
Input Voltage	210V/60Hz	220V/60Hz	230V/60Hz
Input Power (W)	59.3W	62.8W	61.2W
Output Power (W)	54.3W	57.7W	58.5W
Power factor	0.6	0.59	0.58
Efficiency (%)	92%	92%	96%

2.2 Output Characteristics

2.2.1 Line Regulation & Load Regulation

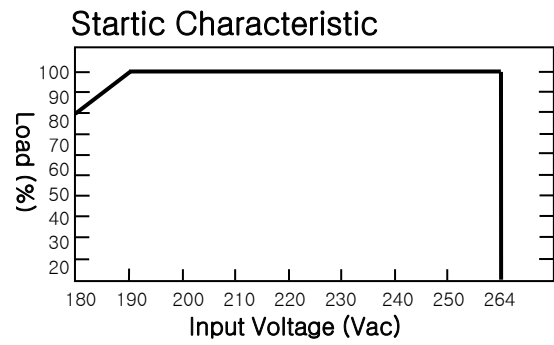
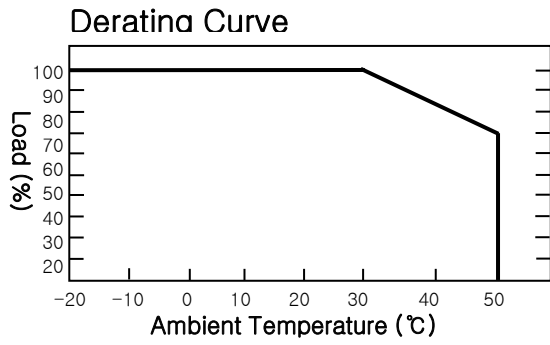
Input Voltage	Output Voltage (V)		
	Min Load	Nor. Load	Max Load
210V/60Hz	–	–	11.08V
220V/60Hz	–	–	11.68V
230V/60Hz	–	–	12.25V

2.3 Protections

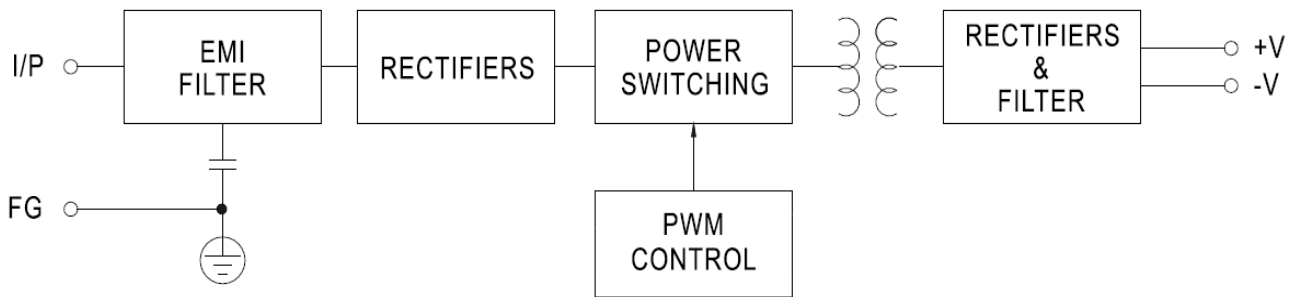
2.3.1 Over Current Protection (OCP)

The power supply will shut down auto-recovery when output current exceeds up load 100%, and it should recover when the over current condition is removed.

3 load Characteristic Curve



4 Block Diagram



5 Case size

