



Features

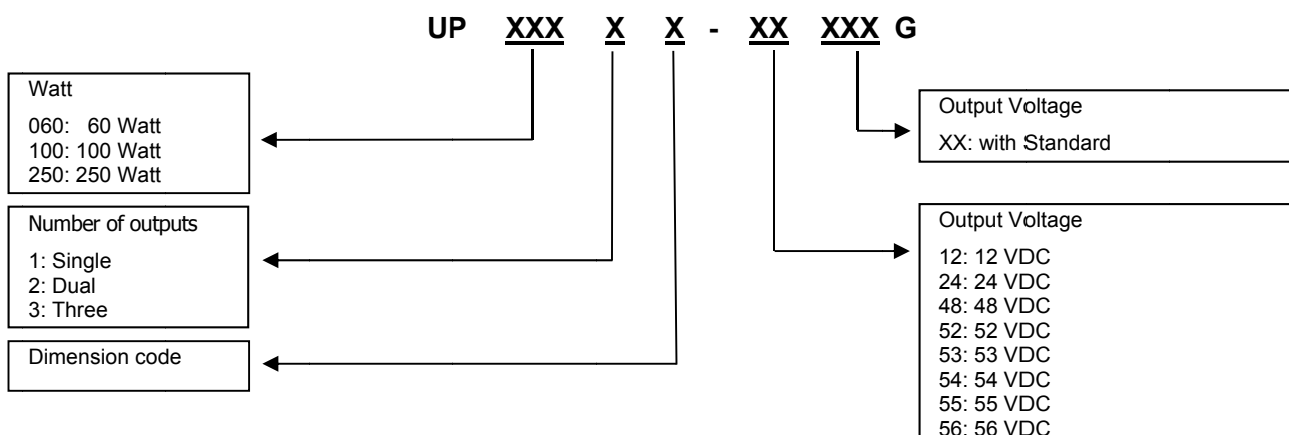
- ◆ Universal Input 90 to 264 VAC
- ◆ 3.15"x 5"x 1.5" Open Frame
- ◆ Active Power Factor Correction for IEC 1000-3-2 Compliance
- ◆ RoHS Compliant

Applications

- ◆ Industrial automation machinery
- ◆ Industrial control system
- ◆ Mechanical and electrical equipment
- ◆ Electronic instruments, equipment or apparatus
- ◆ Power sourcing equipment of POE

PART NUMBERING SYSTEM

The part numbering system for UMEC AC-DC Open Frame follow the format shown in the example below.



Models & Ratings

Model Number	Output Voltage (Volts)	Output Current (Amps)		Max Power (Watt)	Ripple ¹ P-P (mV)	Total Regulation ²
		Min.	Rated			
UP2501C-12	12	0.5	20.8	250	150	± 4%
UP2501C-24	24	0.5	10.4	250	240	± 4%
UP2501C-48	48	0.5	5.2	250	480	± 4%
UP2501C-52	52	0.5	4.8	250	520	± 4%
UP2501C-53	53	0.5	4.71	250	530	± 4%
UP2501C-54	54	0.5	4.62	250	540	± 4%
UP2501C-55	55	0.5	4.54	250	550	± 4%
UP2501C-56	56	0.5	4.46	250	560	± 4%

NOTES:

1. Add a 0.1uF ceramic capacitor and a 47uF E.L. capacitor to the output connector. Peak to peak and RMS metering equipment shall have a 20 MHz response with probes and cables maintaining frequency response from 200 Hz to 100MHz bandwidth. Output ripple and spikes are measured directly at the output terminals of the power supply without the use of the probe ground clip.
2. Total regulation is defined as the static output regulation at 25°C, including initial tolerance, line voltage and load current within stated limits.

INPUT CHARACTERISTICS

Characteristic	Conditions	Min.	Typ.	Max.	Unit
Operating input voltage range		90	115/230	264	VAC
Input frequency		47	50/60	63	Hz
Maximum Input current	Vin=90VAC, 100% Load			5	A
Inrush Current	Vin=230VAC Cold start			130	A
Leakage Current				3	mA

OUTPUT CHARACTERISTICS

Characteristic	Conditions	Min.	Typ.	Max.	Unit
Hold up time	Vin=115VAC, 100% Load		12		mS
Over voltage protection		110		150	%
Over load protection		120		200	%
Short circuit protection		automatics recovery			

GENERAL CHARACTERISTICS

Characteristic	Conditions	Min.	Typ.	Max.	Unit
I/O Isolation Voltage	Input to Output		4242		VDC
	Input to FG		2500		VDC
I/O Isolation Resistance	500VDC	100			MΩ
MTBF	Telcordia SR-332		100		Khrs
Weight			465		g

ENVIRONMENTAL CHARACTERISTICS

Characteristic	Conditions	Min.	Typ.	Max.	Unit
Operating ambient temperature		-25		65	°C
Storage temperature range		-40		85	°C
Operating altitude				4000	M
Humidity		5		95	%RH
Shock		IEC60068-2-27			
Vibration		IEC60068-2-6			

EMC EMISSION

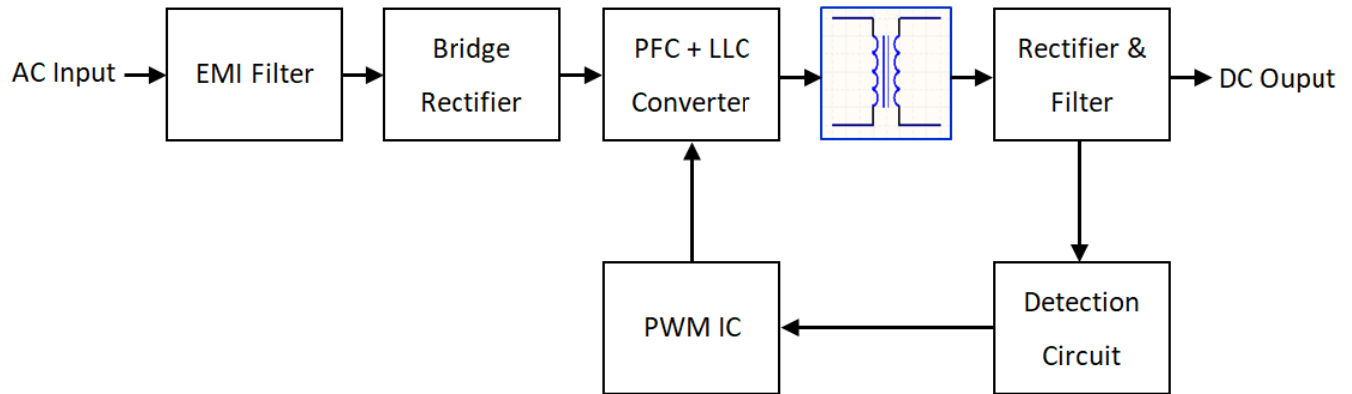
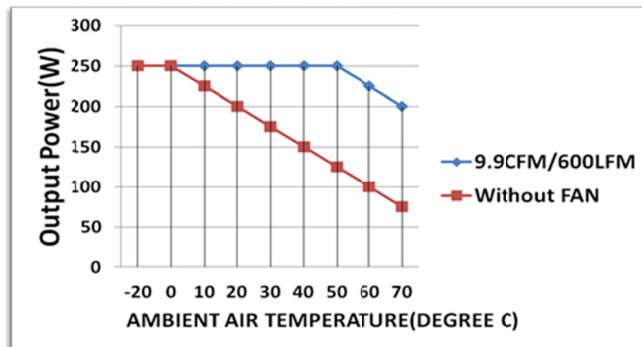
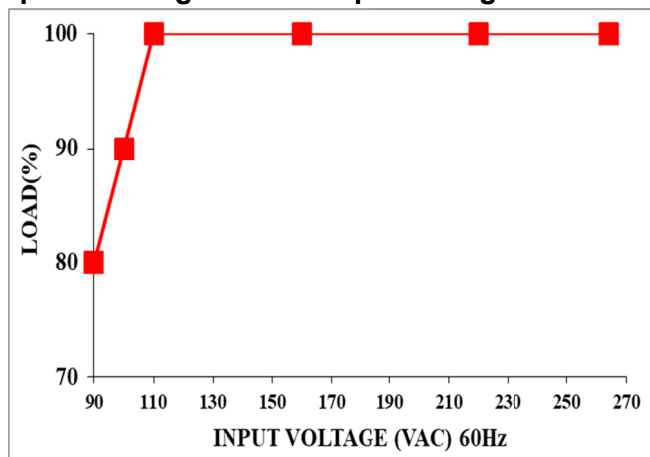
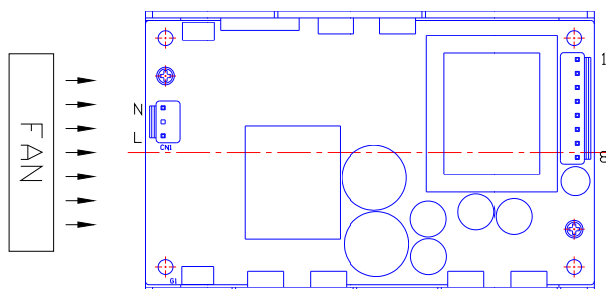
Parameter	Standard	Test Level / Note
Conducted	EN55032(CISPR32), CNS13438	Class B
Radiated	EN55032(CISPR32), CNS13438	Class A
Harmonic Current	EN61000-3-2	
Voltage Flicker	EN61000-3-3	

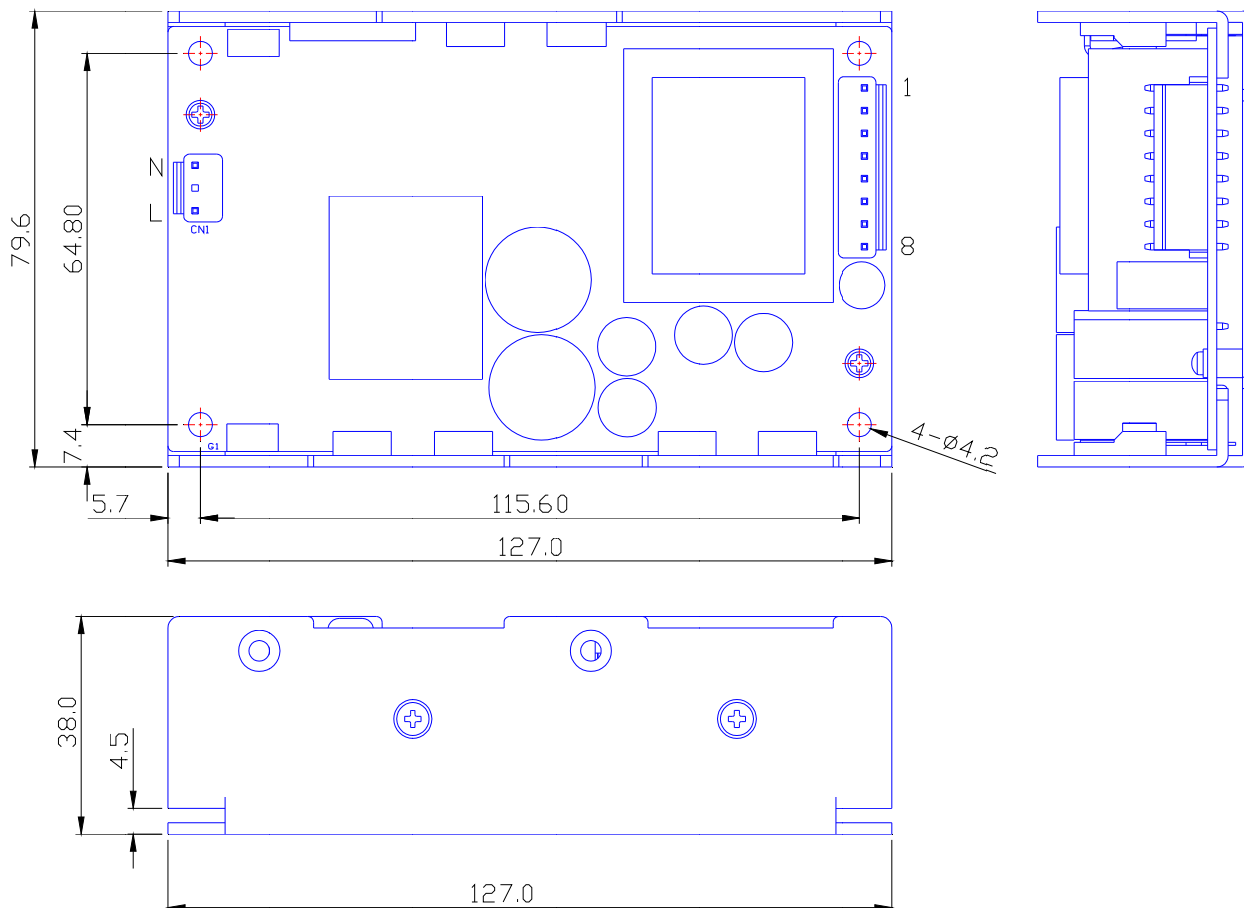
EMC IMMUNITY

EN55032, EN61000-6-2		
Parameter	Standard	Test Level / Note
ESD	EN61000-4-2	Level 2, 8KV air; Level 2, 4KV contact, criteria A
Radiated Susceptibility	EN61000-4-3	Level 2 3V/m, criteria A
EFT/Burst	EN61000-4-4	Level 2 +/-1KV, criteria A
Surge	EN61000-4-5	Level 2, +/-1KV/DM, +/-2KV/CM criteria B
Conducted Susceptibility	EN61000-4-6	Level 2 3Vrms , criteria A
Magnetic Field	EN61000-4-8	Level 1 1A/m, criteria A
Voltage Dips and interruptions	EN61000-4-11	30% reduction, 0.5 periods, Criteria A 30% reduction, 25 periods, Criteria C 60% reduction, 5 periods, Criteria C 100% reduction, 0.5 periods, Criteria B 100% reduction, 250 periods, Criteria C

Safety Approvals

Safety Agency	Safety Standard
CB	IEC60950-1:2005 Ed 2(UP2501C-12/24/48/52/53/54/55/56G) IEC62368-1(UP2501C-12/48/52/53/54/55/56G)
UL	UL60950-1 (2007), CSA 22.2 No.60950-1-1:08(UP2501C-12/24/48/52/53/54/55/56G) UL62368-1(UP2501C-12/48/52/53/54/55/56G)
TUV	EN60950-1:2006(UP2501C-12/24/48/52/53/54/55/56G) EN62368-1(UP2501C-12/48/52/53/54/55/56G)

Block Diagram

⊙ Temperature De-rating curve

⊙ Output Derating curve vs Input Voltage

⊙ forced air cooling of 9.9CFM/600LFM


© MECHANICAL DRAWING


CN1 input connector CS JS-1120-03N02 or equivalent	
Pin	Input voltage
L&N	90-264VAC

CN2 input connector TKP PVHI-08 or equivalent	
Model	
Pin	UP2501C-XX
1	Common
2	
3	
4	
5	Vo
6	
7	
8	

NOTES:

1. All dimensions in mm.
2. Tolerance: XX.X :±1.0 mm
XX.XX:±0.5 mm