



SERIES: SMI6B | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

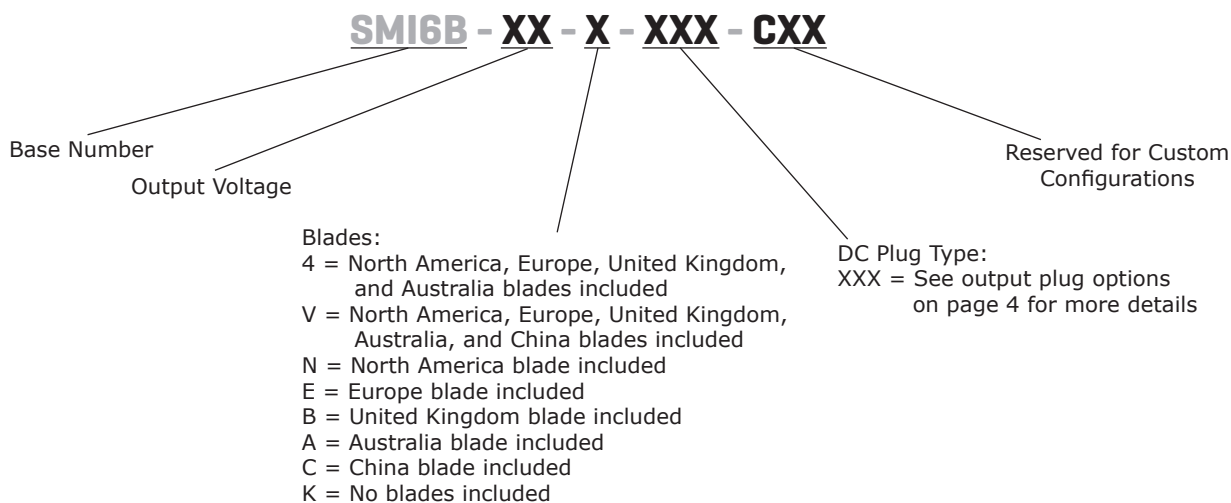
- DoE Level VI, CoC Tier 2 efficiency
- up to 6 W power
- compact design
- interchangeable AC blades
- universal input (90~264 Vac)
- single regulated output from 5~15 Vdc
- over voltage and short circuit protections
- UL/cUL, GS, RCM, CCC, PSE safety approvals
- certified to 62368-1
- custom designs available



MODEL	output voltage	output current	output power	ripple and noise ¹	efficiency level ²
	(Vdc)	max (A)	max (W)	max (mVp-p)	
SMI6B-5	5	1.2	6	300	VI
SMI6B-6	6	1.0	6	300	VI
SMI6B-9	9	0.66	5.94	300	VI
SMI6B-12	12	0.5	6	300	VI
SMI6B-15	15	0.4	6	300	VI

Notes: 1. At full load, 100-240 Vac input, 20 MHz bandwidth oscilloscope, output terminated with 0.1 μF and 10 μF capacitors.
 2. CoC Tier 2 compliant

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current				0.2	A
leakage current	at nominal AC input and frequency			0.25	mA
no load power consumption	at 115/ 230 Vac, 60/50 Hz			0.075	W

OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation			±5		%
load regulation			±5		%
start-up time	at 115 Vac input			3	s
rise time	at 90~264 Vac input			100	ms
hold-up time	at nominal input	5			ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over current protection	output shut down, auto recovery				
	5 Vdc output models			1.8	A
	6 Vdc output models			1.6	A
	9, 12 Vdc output models			1.0	A
	15 Vdc output models			0.8	A
short circuit protection	output shut down, auto recovery				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 10 mA for 1 minute		3,000 4,242		Vac Vdc
safety approvals	UL/cUL, GS, RCM, CCC, PSE				
EMI/EMC	FCC Part 15B Class B, CE				
MTBF	as per Telcordia SR-332, Issue 2 at 115/230 Vac, full load, 0~40°C	50,000			hours
RoHS	yes				

ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		60	°C
operating humidity	non-condensing	20		85	%
storage humidity	non-condensing	5		95	%

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	47 x 34.5 x 26.5				mm
inlet plug	interchangeable blades (North America, Europe, UK, Australia, China)				
weight	5 Vdc output models (without interchangeable blades)		54		g
	all other models (without interchangeable blades)		50		g

MECHANICAL DRAWING

units: mm
tolerance: ±1 mm



INTERCHANGEABLE BLADES					
BLADE DESIGNATOR	N	E	B	A	C
REGION	North America	Europe	UK	Australia	China
BLADE ACCESSORY	SMI-US-3	SMI-EU-3	SMI-UK-3	SMI-AU-3	SMI-CN-3
BLADE					

DC CORD

units: mm



Table 1

MODEL NO.	CABLE	CORD LENGTH
SMI6B-5	UL2468, 22 AWG	1,530 mm ±50
SMI6B-6	UL2468, 22 AWG	1,530 mm ±50
SMI6B-9	UL2468, 24 AWG	1,530 mm ±50
SMI6B-12	UL2468, 24 AWG	1,530 mm ±50
SMI6B-15	UL2468, 24 AWG	1,530 mm ±50

DC PLUG TYPE PART NUMBER KEY

XXX

Plug Polarity:
P = Center Positive

N = Center Negative

Plug Code:
X = Choose a code from the options below

Plug Angle:
"blank" = Straight
R = Right Angle

Plug Polarity		Code		Dimensions (mm)			Plug Angle	
Center Pos.	Center Neg.	Option	Type	A	B	C	Straight	Right
•	•	5	Standard	5.5	2.1	9.5	•	•
•	•	6	Standard	5.5	2.5	9.5	•	•
•	•	7	Standard	3.5	1.35	9.5	•	•
•	•	10	Locking	5.5	2.1	9.5	•	N/A
•	•	11	Locking	5.5	2.5	9.5	•	N/A
•	•	12	EIAJ-1	2.35	0.7	9.5	•	•
•	•	13	EIAJ-2	4.0	1.7	9.5	•	•
•	•	14	EIAJ-3	4.75	1.7	9.5	•	•
N/A	N/A	CUB	USB	USB Type C			•	N/A
N/A	N/A	MUB	USB	Micro USB Type B			•	N/A

Note: 1. Contact CUI for additional plug options

Standard



EIAJ



Locking



USB



REVISION HISTORY

rev.	description	date
1.0	initial release	06/04/2019

The revision history provided is for informational purposes only and is believed to be accurate.



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This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

CUI offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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