

SERIES: SMI36 | DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

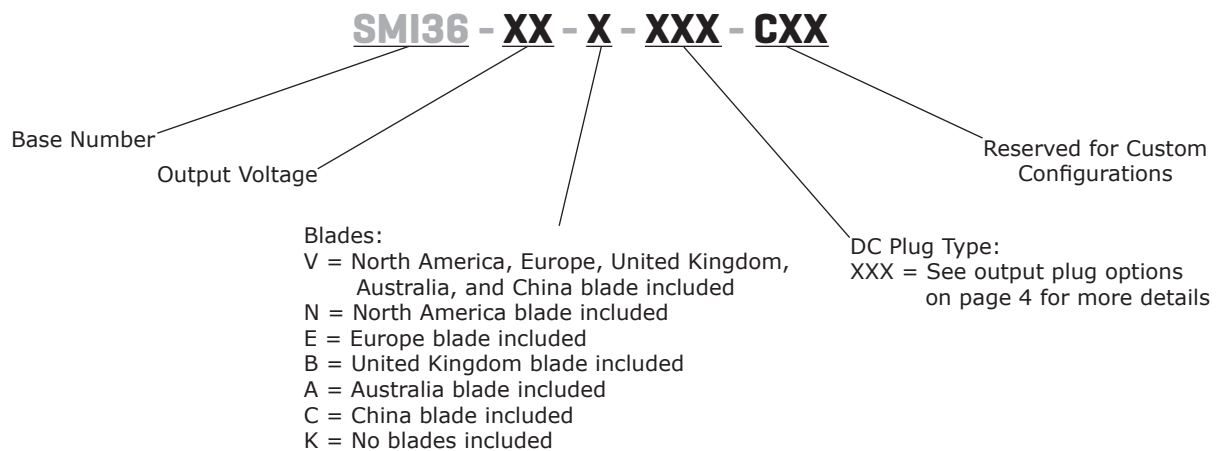
- up to 36 W continuous power
- DoE Level VI, CoC Tier 2 efficiency
- no load power consumption < 0.075 W
- universal input voltage range
- interchangeable Ac blades for global use
- over voltage, over current, and short circuit protections
- UL/cUL, RCM, CCC, and PSE safety approvals
- certified to 60950-1 and 62368-1 standards



MODEL	input voltage	input frequency	output voltage	output current	output power	ripple and noise ¹	efficiency level ²		no load power consumption
	range (Vac)	range (Hz)	nom (Vdc)	max (A)	max (W)	max (mVp-p)	average ³ (%)	10% (%)	typ (W)
SMI36-5	90 ~ 264	47 ~ 63	5	5.0	25	80	85.2	79.8	0.06
SMI36-9	90 ~ 264	47 ~ 63	9	3.34	30	90	88.2	81.4	0.07
SMI36-12	90 ~ 264	47 ~ 63	12	3.0	36	120	88.7	85.3	0.05
SMI36-15	90 ~ 264	47 ~ 63	15	2.4	36	150	89.1	84.3	0.06
SMI36-24	90 ~ 264	47 ~ 63	24	1.5	36	240	89.4	84.3	0.07
SMI36-48	90 ~ 264	47 ~ 63	48	0.75	36	480	91.2	89.1	0.07

Notes: 1. At full load, nominal input, 20 MHz bandwidth oscilloscope, each output terminated with 0.1 μ F multilayer and 47 μ F low ESR electrolytic capacitors.
 2. CoC Tier 2 compliant
 3. Average efficiency is measured at 25%, 50%, 75%, and 100% load.

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90	100~240	264	Vac
frequency		47	50~60	63	Hz
current				1	A
inrush current	at 230 Vac, full load, 25°C, cold start			70	A
leakage current				0.25	mA
no load power consumption	at 115/230 Vac			0.075	W

OUTPUT

parameter	conditions/description	min	typ	max	units
regulation			±5		%
hold-up time	at full load	10			ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	output shut down			180	%
over current protection	output shut down, auto recovery			170	%
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		Vac
isolation resistance	input to output at 500 Vdc	10			MΩ
safety approvals	certified to 62368-1: UL certified to 60950-1: UL UL/cUL, RCM, CCC, PSE, UKCA				
EMI/EMC	FCC Part 15B Class B, CE				
MTBF	as per Telcordia SR-332, 25°C	300,000			hours
RoHS	yes				

ENVIRONMENTAL

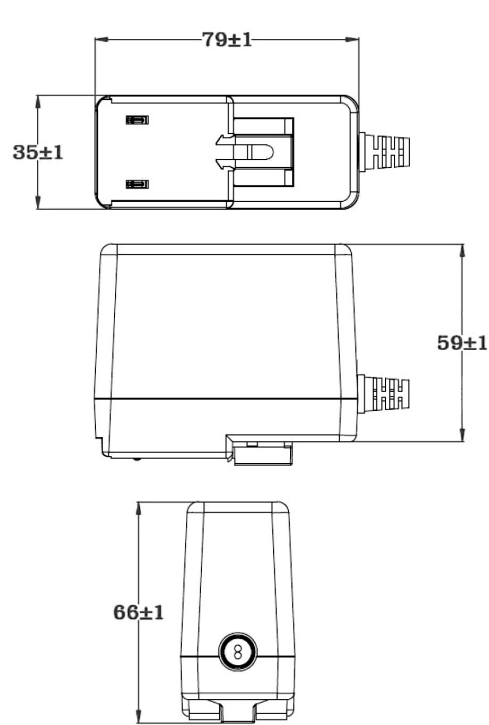
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		80	°C
operating humidity	non-condensing	20		80	%
storage humidity	non-condensing	10		90	%

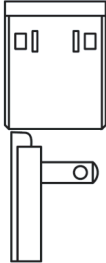
MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	79 x 35 x 66				mm
inlet plug	interchangeable blades (North America, Europe, UK, Australia, China)				
ac blade clip type	pinch clip				
weight	without blades		160		g

MECHANICAL DRAWING

units: mm
tolerance: ±1.0 mm



INTERCHANGEABLE BLADES					
BLADE DESIGNATOR	N	E	B	A	C
REGION	North America	Europe	UK	Australia	China
BLADE ACCESSORY	SMI-US-2	SMI-EU-2	SMI-UK-2	SMI-AU-2	SMI-CN-2
BLADE	US (N) 	Europe (E) 	UK (B) 	Australia (A) 	China (C) 

DC CORD

units: mm

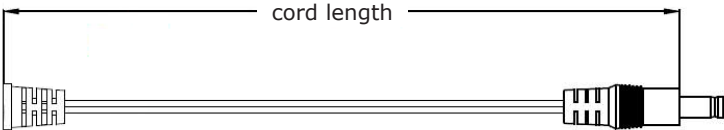
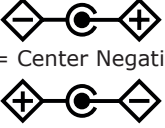


Table 1

MODEL NO.	CABLE	CORD LENGTH
SMI36-5	UL2468, 16 AWG	1,000 mm ±30
SMI36-9	UL2468, 18 AWG	1,500 mm ±30
SMI36-12	UL2468, 16 AWG	1,500 mm ±30
SMI36-15	UL2468, 18 AWG	1,500 mm ±30
SMI36-24	UL2468, 20 AWG	1,500 mm ±30
SMI36-48	UL2468, 22 AWG	1,500 mm ±30

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

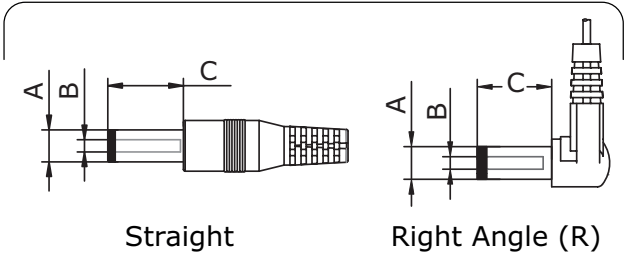
Plug Polarity		Code		Dimensions (mm)			Plug Angle	
Center Pos.	Center Neg.	Option	Type	A	B	C	Straight	Right
•	•	5	Standard	5.5	2.1	9.5	•	•
•	•	6	Standard	5.5	2.5	9.5	•	•
•	•	7	Standard	3.5	1.35	9.5	•	•
•	•	8	Standard	3.8	1.35	9.5	•	•
•	•	9	Standard	3.8	1.05	9.5	•	•
•	•	10	Locking ²	5.5	2.1	9.5	•	N/A
•	•	11	Locking ²	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	ST	Stripped & Tinned				N/A	N/A

Note:

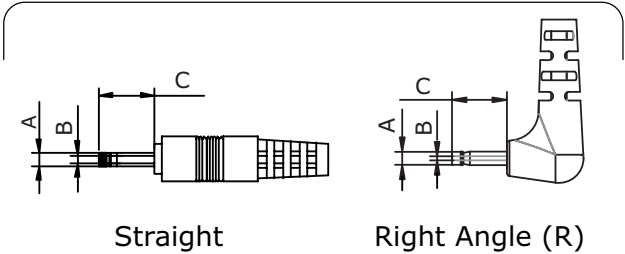
1. Contact CUI for additional plug options

2. Maximum insertion depth is 10mm

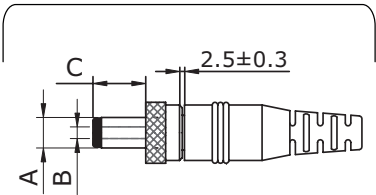
Standard



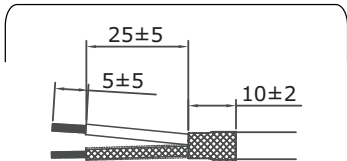
EIAJ



Locking



Stripped & Tinned



REVISION HISTORY

rev.	description	date
1.0	initial release	08/07/2015
1.01	updated datasheet	11/04/2015
1.02	housing width changed to 35.3 mm	01/27/2016
1.03	changed wire gauge on 12 Vdc models, updated datasheet	09/15/2016
1.04	added 62368-1 standard	08/31/2018
1.05	cable drawing update	12/05/2019
1.06	company logo updated	09/30/2020
1.07	model table updated	11/27/2020
1.08	UKCA added to specification	08/11/2021
1.09	plug polarity symbols updated	09/16/2021
1.10	case dimensions updated	03/23/2022
1.11	dc plugs updated	04/29/2022
1.12	ac blade clip type added	06/23/2022
1.13	datasheet updated	11/20/2024

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