

connectPower
POWER FOR AUTOMATION

Weidmüller

300W SWITCHMODE POWER SUPPLY
POWER FACTOR CORRECTED
CAT. NO.: 991625
OUTPUT: NOMINAL 24VDC/12.5A
INPUT: UNIVERSAL RANGE

ON CURRENT LIMIT FAULT

Pout > 300W
Vout > 30VDC
Vout < 14VDC
T > 100°C

MONITOR LOAD FAULT
V₁ T₁ r₁ r₁
- + - + - +
NO COM NC

INPUT
AC: 115-230VAC ± 10%
3.3-1.65A
50-60Hz
DC: 100-200V
L=+, N=-

CAUTION ⚠
• Read instruction manual before installation and use.
• Risk of electric shock. Do not remove cover. No user serviceable parts inside.

Vout ADJ.
22-28 VDC

OUTPUT
300W MAX

Power for Automation™



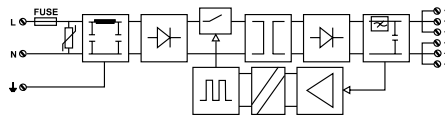
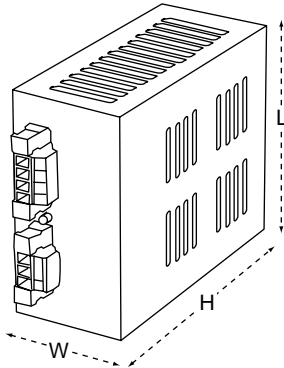
connectPower
POWER FOR AUTOMATION

Switchmode Power Supplies

2001a

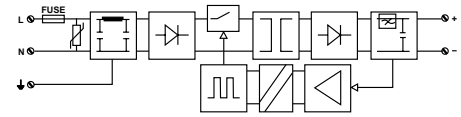
Weidmüller 
The Interface Partner

CP-SNT 12W



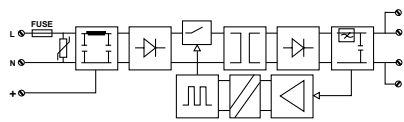
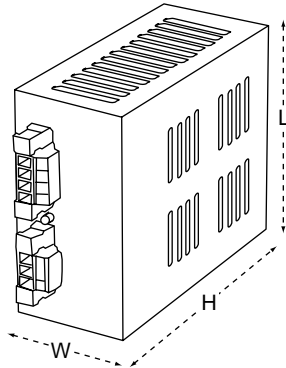
Input Voltage	minimum	85Vac, 120Vdc
	typical	115-230Vac±10%, 50/60Hz
	maximum	265Vac, 300Vdc
Input Current	@115Vac	250mA RMS ±20%
(average values for reference only)	@230Vac	150mA RMS ±20%
	@125Vdc	125mA ±20%
	@250Vdc	65mA ±20%
Input Protection	fuse	2A slow blow (internal)
	inrush current	Thermistor
	overvoltage	Varistor
Switching Frequency		100kHz PWM
Efficiency @max. load		79%
Maximum Ripple		0.1% RMS
Regulation	load (10-100% load)	0.2%
	line	0.2% 85Vac to 265 Vac In
Overload Protection		Overcurrent shutdown with automatic restart plus thermal shutdown
Max. Load Capacitance on output		5,000µF
Hold time	@115Vac	14ms
(full output current after loss of input)	@230Vac	70ms
Temperature:	storage	-40°C...+85°C
	operating	-20°C...+50°C full rated load derate: 33% @60°C
Humidity	operating	20 to 85%RH non-condensing
	storage	20 to 90%RH
Galvanic Isolation	input to output	3kV
	input/output to rail	4kV
	input to ground	1.5kV
	output to ground	500V
Wire size		26-12AWG (0.1-4.0mm ²)
Dimensions in mm (length x width x height)		90 x 18 x 112.5
Weight		140g
Mounting		TS35 Rail
Special Features		
Output voltage/max.current/catalog no.	24Vdc / 0.5A	991884 0024
Approvals/Certifications	CSA, UL Listed, CE mark	

CP-SNT 24W



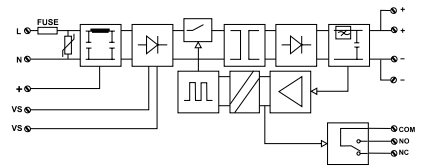
Input Voltage	minimum	85Vac, 120Vdc
	typical	115-230Vac±10%, 50/60Hz
	maximum	265Vac, 300Vdc
Input Current	@115Vac	480mA RMS ±20%
(average values for reference only)	@230Vac	270mA RMS ±20%
	@125Vdc	280mA ±20%
	@250Vdc	140mA ±20%
Input Protection	fuse	2A slow blow (internal)
	inrush current	Thermistor
	overvoltage	Varistor
Switching Frequency		100kHz PWM
Efficiency @max. load		86%
Maximum Ripple		0.3% RMS
Regulation	load (10-100% load)	2%
	line	0.2%
Overload Protection		Overcurrent shutdown with automatic restart plus thermal shutdown
Max. Load Capacitance on output		8,000µF
Hold time	@115Vac	14ms
(full output current after loss of input)	@230Vac	68ms
Temperature:	storage	-40°C...+85°C
	operating	-20°C...+50°C full rated load derate: 33%@60°C
Humidity	operating	20 to 85%RH non-condensing
	storage	20 to 90%RH
Galvanic Isolation	input to output	3kV
	input/output to rail	4kV
	input to ground	1.5kV
	output to ground	500V
Wire size		26-12AWG (0.1-4.0mm ²)
Dimensions in mm (length x width x height)		90.5 x 52 x 62.5
Weight		160g
Mounting		TS35 Rail
Special Features		
Output voltage/max.current/catalog no.	24Vdc / 1A	992889 0024
	28Vdc / 1A	992889 0028
	15Vdc / 1.5A	992889 0015
	12Vdc / 1.5A	992889 0012
	5Vdc / 2A	992889 0005
Approvals/Certifications	CSA, UL Listed, CE mark	

CP-SNT 55W



Input Voltage	minimum	85Vac, 120Vdc
	typical	115-230Vac±10%, 50/60Hz
	maximum	265Vac, 300Vdc
Input Current	@115Vac	1.10A RMS ±10%
(average values for	@230Vac	0.55A RMS ±10%
reference only)	@125Vdc	590mA ±10%
	@250Vdc	315mA ±10%
Input Protection	fuse	2A slow blow (internal)
	inrush current	Thermistor
	overvoltage	Varistor
Switching Frequency		100kHz PWM
Efficiency @max. load		80%
Maximum Ripple		<50mV RMS
Regulation	load (10-100% load)	1%
	line	0.8%
Overload Protection		Overcurrent shutdown with automatic restart plus thermal shutdown
Max. Load Capacitance on output		10,000µF
Hold time	@115Vac	30ms
(full output current after loss of input)	@230Vac	180ms
Temperature:	storage	-40°C...+85°C
	operating	-20°C...+50°C full rated load
		derate: 24V-1.7A @60°C
Humidity	operating	20 to 85%RH non-condensing
	storage	20 to 90%RH
Galvanic Isolation	input to output	3kV
	input/output to rail	3kV
	input to ground	1.5kV
	output to ground	500V
Wire size		26-12AWG (0.1-4.0mm ²)
Dimensions in mm (length x width x height)		98 x 57 x 131
Weight		478g
Mounting		TS35 Rail, Chassis (consult factory)
Special Features		
Output voltage/max.current/catalog no.		
	24Vdc - 28Vdc / 2.3A	992748 0024
	48Vdc / 1.04A	992748 0048
	12Vdc - 15Vdc / 3A	992748 0012
	5Vdc / 3A	992748 0005
Approvals/Certifications		
	CSA, UL Listed, CE mark	
	CSA Class1 Div 2 (992748 0024 only)	

CP-SNT 160W



Input Voltage	minimum	85Vac / 195Vac
	typical	115Vac / 230Vac±10%,(selectable) 50/60Hz
	maximum	138Vac / 250Vac
Input Current	@115Vac	2.9A RMS ±20%
(average values for	@230Vac	1.45A RMS ± 20%
reference only)	@125Vdc	
	@250Vdc	
Input Protection	fuse	6.3A slow blow (internal)
	inrush current	Thermistor
	overvoltage	Varistor
Switching Frequency		65kHz PWM
Efficiency @max. load		85%
Maximum Ripple		0.2% RMS
Regulation	load (10-100% load)	2%
	line	0.5%
Overload Protection		Overcurrent shutdown with automatic restart and output overvoltage protection
Max. Load Capacitance on output		6,000µF
Hold time	@115Vac	30ms
(full output current after loss of input)	@230Vac	30ms
Temperature:	storage	-40°C...+85°C
	operating	-20°C...+50°C full rated load
		derate: 24V-5A @ 60°C
Humidity	operating	20 to 85%RH non-condensing
	storage	20 to 90%RH
Galvanic Isolation	input to output	3kV
	input/output to rail	3kV
	input to ground	1.5kV
	output to ground	500V
Wire size		26-12AWG (0.1-4.0mm ²)
Dimensions in mm (length x width x height)		127 x 57 x 175
Weight		880g
Mounting		TS35 Rail, Chassis (consult factory)
Special Features		Fault Relay (NO, C, NC), Load Sharing
Output voltage/max.current/catalog no.		
	24Vdc - 28Vdc / 6.5A	992534 0024
Approvals/Certifications		
	CSA, UL Listed, CE mark	

The complete DC power solution



300W

Input

- universal 115-230Vac, 100-200Vdc
- active power factor corrected

Analog Outputs

- three 0-10Vdc signals representing:
 - output voltage
 - output current
 - internal temperature

Load Sharing

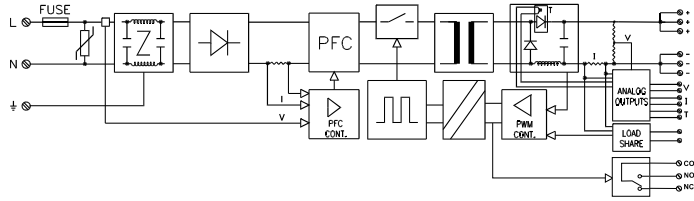
- parallel from 2 to 5 units for increased current or redundancy
- no adjustments required
 - simply connect the load sharing terminals

Fault Relay

- form C
- 250Vac @ 0.1A, 30Vdc @ 1A
- relay de-energizes with undervoltage, overvoltage, overtemperature, internal fault and short circuit

Output

- 24Vdc@12.5A nominal adjustable: 22-28Vdc
- over-current and over-temperature protection
- multiple + and - terminals for easy power distribution



Input voltage	minimum	86Vac, 100Vdc
	typical	115-230Vac $\pm 10\%$ 50/60Hz
	maximum	265Vac, 200Vdc
Input current @300Watts	@115Vac	3.3A RMS $\pm 10\%$
	@230Vac	1.65A RMS $\pm 10\%$
	@100Vdc	3.7A $\pm 10\%$
	@200Vdc	1.85A $\pm 10\%$
Input power factor		0.99 (under all load conditions)
Input current		Sinusoidal (active power factor corrected)
Topology		Boost PFC/forward PWM
Input protection	fuse	5A slow blow 5x20mm
	inrush current	Thermistor
	overvoltage	Varistor
PFC and PWM switching frequency		100kHz $\pm 5\%$
Efficiency	@max. load	80% typical
Switch ON time	@115Vac	1.5 sec.
	@230Vac	0.7 sec.
Output ripple	@120Hz	20mVac RMS
	@100kHz	2mV peak to peak (differential voltage)
Regulation	load (10-100% load)	1%
	line (86-265Vac RMS)	0.2%
Protection	overvoltage	Vout > 30Vdc
	undervoltage	Vout < 14Vdc
	overcurrent	@Vout = 22Vdc, Iout > 13.8A @Vout = 24Vdc, Iout > 13.5A @Vout = 28Vdc, Iout > 11.6A
	thermal	PWM heatsink temperature > 100°C
Output voltage adjustment range		22Vdc - 28Vdc (pot. adj.)
Nominal output current	22Vdc	13.6A
	24Vdc	12.5A
	28Vdc	10.7A
Indicators	CURRENT LIMIT	Yellow LED
	FAULT	Red LED, shutdown due to overvoltage, undervoltage or over temperature
	ON	Green LED
Shutdown		Overvoltage, undervoltage or over temperature for more than 2 sec the unit shuts down and the FAULT LED turns ON.
Monitor signals		0-10Vdc analog output signals proportional to the output voltage, output current and internal temperature. output voltage = 0-30Vdc \rightarrow monitor signal - 0-10Vdc $\pm 3\%$ output current = 0-15A \rightarrow monitor signal - 0-10Vdc $\pm 3\%$ heat sink temperature = 0-100°C \rightarrow monitor signal - 0-10Vdc $\pm 3\%$
Monitor signals output drive		1mA typical
Load share		up to 5 power supplies in parallel can share the current
Maximum load capacitance		10,000 μ F
Hold time	@115Vac	40 mSec
(full output current after loss of input)	@230Vac	40 mSec
Temperature	storage	-40°C to +85°C
	operating	-20°C to +50°C (full output current)
	derating	output current capacity reduced by 20% for up to 60°C
Humidity	operating	20 to 85%RH non-condensing
	storage	20 to 90%RH
Galvanic isolation	input to output	3kV
	input/output to rail	3kV
	input to ground	1.5kV
	output to ground	500V
Wire size	input/output	26 - 12AWG (0.1-4.0mm ²), BLZ
	others	28 - 14AWG, (0.08-2.5mm ²), BL3.5
Dimensions (LxWxH) in mm		104 x 242 x 155
Weight		1180g
Mounting		TS35 Rail, chasis (consult factory)
Output voltage / max. current / catalog no.		24Vdc / 12.5A nominal / 991625
Approvals/certifications		CSA, UL Listed, CE mark
		This unit uses forced air ventilation. An internal fan is located on the input side. Fan noise: 26dB(A)@1meter Airflow: 14.5CFM

The products of the Weidmüller Group connect, condition and network electrical signals and power in equipment, machinery and installations.

We serve customers in the market of

- Industrial automation
- Process automation
- Transportation

worldwide.

Australia
Weidmüller (Klippon Products) Pty. Ltd.
43 Huntingwood Drive, Huntingwood 2148
P.O. Box 6944, Blacktown, N.S.W. 2148
Tel. (47) 9671 9999 · Fax: (47) 9671 9900

Austria
Weidmüller GmbH
IZ NO-Sud, Strasse 2, Objekt M2, 2355, Wiener
Tel. (2236) 6808-0 · Fax (2236) 6708 - 114

Bahrain
Representative Office
Weidmüller (Middle East) Ltd., P.O. Box 545004, Jidaf
Tel. 590449 · Fax 593714

Belgium
Weidmüller N.V.
Ambachtenlaan 11 A, 3002 Heverlee
Tel. (16) 39 59 90 · Fax (16) 40 51

Brazil
Weidmüller do Brasil Ltda.
Rua Antonio das Chagas, 439
Chácara Santo Antonio, Brasil
CEP 04714-000
Tel. (11) 51 84 24 84 · Fax. (11) 51 84 24 83

Bulgaria
Weid-Bul eOOD
ul. Nezabravka 33A, 1113 Sofia
Tel. (92) 657294 · Fax (92) 658186

Canada
Weidmüller Ltd.
10 Spy Court · Markham, Ontario L3R 5H6
Tel. (905) 475-1507 · Fax: (905) 475-2798

China
Chengdu Weidmüller Interface Co. Ltd.
Luo Jiá Nian, Outwest Chengdu/ Sichuan 610072
Tel: (28) 7 77 77 04 · Fax: (28) 7 76 81 74

Croatia
Elektro Partner d.o.o.
Radnicka cesta 22 10000 Zagreb
Tel. (1) 61 156410 · Fax (1) 61 15641

Czech Republic
Weidmüller s.r.o.
M. Cibulkové 14, 140 00 Praha 4
Tel. (2) 437457 · Fax (2) 430694

Denmark
Knud Wexø A/S
Skættekæret 11 · P.O. Box 154 · 2840 Holte
Tel. (45) 423211 · Fax (45) 423450

Finland
Juha-Elektro Oy
Kylvöpolku 6 · P.O. Box 10 · 00681 Helsinki
Tel. (0) 478 411 · Fax (0) 478 41311

France
Weidmüller S.A.R.L.
11, Rue Edouard Branly
B.P. 13 - Z.A.E. · 95221 Herblay Cedex
Tel. (1) 34503450 · Fax (1) 34503497

Germany
Weidmüller GmbH & Co.
Postfach 2807 · 33058 Paderborn
Tel. (05252) 960-0 · Fax (05252) 960-116

Great Britain
Weidmüller (Klippon Products) Ltd.
1 AbbeyWood Rd, Kingshill,
West Malling, Kent ME19 4YT
Tel. (1795) 580999 · Fax (1732) 874296

Greece
Dion. Giannikos Co.
45 Kivellis Str., 111 46 Athen
Tel. (01) 2137 450-2 · Fax (01) 29 11140

Hong Kong
United Equity Limited
Suite B, 11/F International Industrial Centre
2-8 Kwei Tei Street, Shantin, New Territories
Tel. 2687 6739 · Fax 2687 6735

Hungary
Weidmüller Kereskedelmi Kft
Ulászóló utca 24, 1114 Budapest
Tel. (1) 209-3050/3051 · Fax (1) 209-3052

India
Weidmüller Pte. Ltd.
Site No. 6 Lottegollahalli,
Near Dollar Colony, Bangalore
Tel. (80) 3 41 21 74 · Fax (80) 3 41 80 29

Israel
A.U. Shay Ltd.
Embar Street 23/25, P.O. Box 10049
Petch-Tikva 49222
Tel. (3) 9233601 · Fax (3) 9234601

Italy
Weidmüller S.r.l.
Via Einstein 4 · 20092 Cinisello Balsamo
Milano
Tel. (2) 6124941 · Fax (2) 6124945

Japan
Nihon Weidmüller Co. Ltd.
FORO M Building 2-1-18, Iwamoto-cho
Chiyoda-ku, Tokyo 101
Tel. (3) 58205747 · Fax (3) 58205807

Korea
Weidmüller (Korea) Ltd.
2nd Floor, 38/4 1161, Onchun-2Dong,
Dong Rae-Gu, Pusan
Tel. (51) 556-4661 · Fax (51) 556-7408

Malaysia
Weidmüller (Malaysia) Sdn. Bhd.
22 Jalan PJS 11/16, Bandar Sunway,
46150 Petaling Jaya, Selangor Darul Ehsan
Tel. (3) 733 7363 · Fax (3) 733 6562

Mexico
Weidmüller S.A. de C.V.
31 Poniente 15175, Piso, Col. Los Volcanes
72410 Puebla, Pue.
Tel. (22) 372549 · Fax (22) 431981

Netherlands
Weidmüller B.V.
Franciscusweg 221 · 1216 SE Hilversum
Tel. (35) 6261261 · Fax (35) 6232044

Norway
Siv. Ing. J.F. Kunudtzen A/S
Billingstadslette 97 · Post Boks 118 · 1360 Nesbru
Tel. (66) 849080 · Fax (66) 980955

Poland
Weidmüller Sp.z.o.o.
Al. Prymasa Tysiaclecia 81a, Pawilon 12, 01242 Warszawa
Tel. (22) 327156 · Fax (22) 379093

Portugal
Weidmüller-Sistemas de Interface SA.
Estrada Outeiro de Polima, Lote B. No. B2
Aboboda 2785-518 São domingos de Rana
Tel. (01) 445 91 90 · Fax (01) 445 58 71

Romania
SC Rominterface Impex SRL
B-dul Burebista nr. 1, Bl. D15, Sc. 2, Parter, Ap. 35
Sector 3 · RO - Bucuresti
Tel. (1) 321 0198 · Fax (1) 321 0198

Singapore
Weidmüller Pte. Ltd.
1 Kallang Sector # 07-01/03, Singapore 349276
Tel. 841-5311 · Fax 841-5377

Slovakia
ELEKTRIS s.r.o.
Stara Vajnorská 25, 83104 Bratislava
Tel. (2) 43 74 57 · Fax (2) 43 06 94

Slovenia
ELEKTROPOJJI d.o.o.
Stegne 25, 61000 Ljubljana
Tel. (61) 1599594 · Fax (61) 1599294

South Africa
Weidmüller (Pty) Ltd.
5, Bundo Road, Sebenze Ext., PO Box 193
Edenvale 1610
Tel. (11) 4521930-35 · Fax (11) 4526455

Spain
Weidmüller S.A.
Narciso Monturiol No. 11, Poligono Industrial No. 1
08960 Sant Just Desvern, Barcelona
Tel. (3) 3722061 · Fax (3) 3718055

Sweden
Weidmüller AB Stockholm (Main Offices)
Skebokvarnsvägen 370, 124 50 Bandhagen
Tel. (8) 7272300 · Fax (8) 7272480

Switzerland
Carl Geissler + Co.
Industriest. 7, 8117 Fällanden
Tel. (1) 8251161 · Fax (1) 8255240

Taiwan
Lumax Intern. Corp. Ltd.
7th Floor No. 52 Sec. 3, Nankong Road
P.O. Box 3-006, Taipei
Tel. (02) 7883656 · Fax (02) 7827369

Thailand
Pisanu Engineering & Construction Co. Ltd.
800/2 Asoke-Dindaeng Road · Dindaeng
Bangkok 10320
Tel. (2) 245 9113 · Fax (2) 246 3214

Turkey
Weidmüller Elektronik Ticaret Ltd. Sirketi
Kore Sehitleri Caddesi 34/1, 80300 Zincirlikuyu, Istanbul
Tel. (212) 2730830 · Fax (212) 2672038

Ukraine
TEKO TOB
A / C 377, Ul. Tschujkova 2. 256400 Belaja Zerkow
Tel. (0) 4463 56892 · Fax (0) 4463 67610

USA
Weidmüller Inc.
821 Southlake Blvd., Richmond, VA 23236
Tel. (804) 794-2877 · Fax (804) 794-0252

Fed Rep. Yugoslavia/Bosn.-Herz/Macedonia
Elektrosistem d.o.o.
Pariscemune 41, 11070 Novi-Beograd
Tel. (11) 69 36 08 Fax (11) 69 72 12

Other Countries
Weidmüller Interface GmbH & Co.
Postfach 3030 · D-32720 Detmold
Tel. (05231) 14-0 · Fax (05231) 14-2083