MP1S-5300V-B1

300 Watt

- **Compact design**
- **TÜV approval up to +50 °C**
- **Silent due to fan regulation**

Thanks to its high efficiency and a temperature-regulated fan the noise produced by the MP1S-5300V-B1 is minimal. Its robust construction with high-quality components ensures a long service-life and a high reliability. Designed for ambient temperatures up to +50 °C, the MP1S-5300V-B1 also convinces by its excellent regulation properties. It has the medical safety approvals IEC/EN60601-1 and UL60601-1.

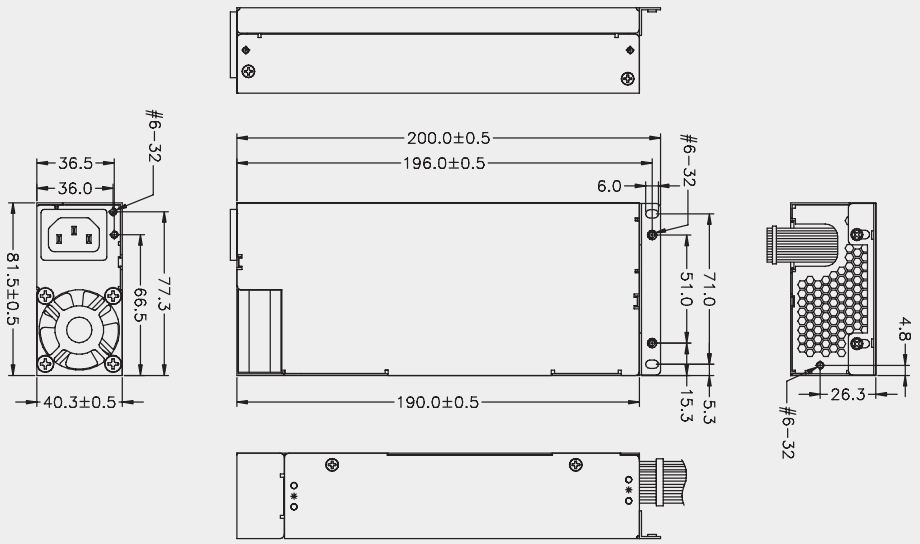
Technical data	
Input voltage	90…264 V AC, active PFC
Input frequency	47…63 Hz
Input current	4.5 A (115 V AC) / 2 A (230 V AC)
Inrush current	70 A (115 V AC) / 140 A (230 V AC)
Efficiency	80…84 % (115 V AC, full load)
Hold up time	>16 ms
Power-Good-Signal	Switch on delay 100…500 ms Switch off delay 1 ms
Protection	Short circuit protection: +5 V, +12 V, switch off /+3.3 V, -12 V, +5 V_{sb}, auto recovery Overload protection: 110…160 %, switch off Overvoltage protection: +3.3 V (3.6…4.3 V), +5 V (+5.6…+6.5 V), +12 V (+13.2…+15 V) Overcurrent protection: +3.3 V (18.7…27.2 A), +5 V (19.8…28.8 A), +12 V (26.4…38.4 A)
Insulation voltage	Input / Output 4000 V AC (2 x MOPP) Input / FG 1500 V AC (1 x MOPP)
Insulation resistance	Input / Output and Input / FG 100 MΩ at 500 V DC test voltage
Leakage current	<300 µA, 115 V AC / 230 V AC
Safety / EMC	IEC/EN60601-1 3rd Edition, UL60601-1 3rd Edition, CCC, CE
Temperature	Operating: 0…+50 °C / Storage: -20…+80 °C
Max. operation altitude	3000 m
MTBF	>187 000 h according to MIL-HDBK-217F at +25 °C with fan
Humidity	Operating: 10…85 % RH, non-condensing Storage: 10…90 RH, non-condensing
Dimensions (W x D x H)	81.5 x 190 x 40.3 mm ±0.5 mm
Weight (net)	1.2 kg

X1-184 (optional)
Mounting-kit for installation in standard 1U chassis (100 x 190 mm)
Front plate and backside bracket

Article No.	Output voltage	Output current min	Output current max	Load regulation	Ripple & Noise
MP1S-5300V-B1	+3.3 V	0 A	17 A	±5 %	60 mV
	+5 V	0 A	18 A	±5 %	60 mV
	+12 V	0 A	24 A	±5 %	120 mV
	-12 V	0 A	0.3 A	±10 %	120 mV
	+5 V_{sb}	0 A	2.5 A	±5 %	60 mV

Max. output power is 300 W. Combined power at +3.3 V and +5 V is max. 120 W. Ripple and Noise was measured by a 20 MHz bandwidth limited oscilloscope with connected 220 µF electrolytic capacitor and 100 nF ceramic capacitor at each output. As a power component this PSU is for assembly purposes only and must not be operated in unassembled condition. The final assembly has to comply with the valid EMC and safety standards.

Drawing MP1S-5300V-B1



Tolerance ±0.5 mm

Cable harness MP1S-5300V-B1

ATX/EPS, 350 mm
20+4 pin

BLACK	(GND)	24		12	ORANGE	(+3,3V)
RED	(+5V)	23		11	YELLOW	(+12V)
RED	(+5V)	22		10	YELLOW	(+12V)
RED	(+5V)	21		9	PURPLE	(+5Vsb)
NC		20		8	GREY	(PG)
BLACK	(GND)	19		7	BLACK	(GND)
BLACK	(GND)	18		6	RED	(+5V)
BLACK	(GND)	17		5	BLACK	(GND)
GREEN	(PSon)	16		4	RED	(+5V)
BLACK	(GND)	15		3	BLACK	(GND)
BLUE	(-12V)	14		2	ORANGE	(+3,3V)
ORANGE	(+3,3V)	13		1	ORANGE (+3,3V REMOTE SENSE) / BROWN	

P4 / EPS, 370 mm
4+4 Pin

YELLOW	(+12V)	8	4	BLACK	(GND)
YELLOW	(+12V)	7	3	BLACK	(GND)
YELLOW	(+12V)	6	2	BLACK	(GND)
YELLOW	(+12V)	5	1	BLACK	(GND)

PCI Express, 400 mm
6+2 Pin

BLACK	(GND)	8	4	BLACK	(GND)
BLACK	(GND)	7	3	YELLOW	(+12V)
BLACK	(GND)	6	2	YELLOW	(+12V)
BLACK	(GND)	5	1	YELLOW	(+12V)

HD, 450 mm
HD, 150 mm
FDD, 150 mm

4	RED	(+5V)
3	BLACK	(GND)
2	BLACK	(GND)
1	YELLOW	(+12V)

SATA, 350 mm
SATA, 150 mm
SATA, 150 mm
SATA, 150 mm

ORANGE	(+3,3V)
BLACK	(GND)
RED	(+5V)
BLACK	(GND)
YELLOW	(+12V)

Tolerance ±20 mm

Optional accessory ▷▷▷ *For detailed information please visit our website* ***www.bicker.de*** *and refer to the article number.*

Article No.	Description
X1-184	Mounting kit for installation in standard 1U chassis (100 x 190 mm), consisting of front plate and backside bracket
X1-132	Power cord with European IEC-60320-C13 connector

Specification is subject to change without notice. Errors excepted. Date: 08.05.2018