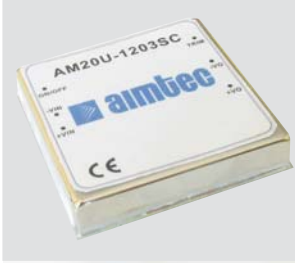


20 watt dc-dc converters



- Power Modules for PCB Mounting
- Regulated Output
- Low Ripple and Noise
- Vout trim and ON/OFF Control
- 2 Year Product Warranty

ELECTRICAL SPECIFICATIONS

Outputs	Input voltage (VDC)			Output voltage	Output current max.
	9...18V	18...36V	36...75V		
Single output	AM20U-1203SC	AM20U-2403SC	AM20U-4803SC	3.3VDC	4000mA
	AM20U-1205SC	AM20U-2405SC	AM20U-4805SC	5VDC	4000mA
	AM20U-1212SC	AM20U-2412SC	AM20U-4812SC	12VDC	1670mA
	AM20U-1215SC	AM20U-2415SC	AM20U-4815SC	15VDC	1330mA
	AM20U-1224SC	AM20U-2424SC	AM20U-4824SC	24VDC	830mA

Max output wattage (W)		13.2W	20W	20W	20W	20W
Input	Input filter	π type				
Output	Voltage accuracy	±2%				
	Line regulation (HL-LL) (typ.)	±0.5%				
	Load regulation (10-100%) (typ.)	±0.5%				
	Ripple	<0.2% Vout +20mV max (Vp-p)				
	Noise	<0.5% Vout +50mV max (Vp-p)				
	Efficiency	77... 82%				
	Switching frequency	200kHz				
Protection	Over current protection	Works over 120% of rating and recovers automatically.				
	Over voltage protection	Zener diode clamp				
	Short circuit protection	Hiccup, auto-recovery				
Isolation	Voltage	1500 VDC.				
	Resistance	10 ⁹ ohms				
	Capacitance	1000 pF				
Environment	Operating temperature	-25°C...+71°C				
	Storage temperature	-55°C...+105°C				
	Case temperature	+95°C max.				
	Temperature coefficient	±0.02% Per°C				
	Humidity	95% RH				
Physical	MTBF	>550,000 h @ 25°C (MIL-HDBK-217F)				
	Dimension (L x W x H)	2.0 x 2.0 x 0.42 Inches (50.8 x 50.8x 10.8 mm)				
	Case Material	Nickel-Coated Copper with Non-Conductive base, six-side shielded.				
	Weight	70 g				
Safety	Cooling method	Free-air convection				
	Agency approvals	CE (Pending)				
EMC	EMI (Conducted & Radiated Emission)	EN 55022 class A				

All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

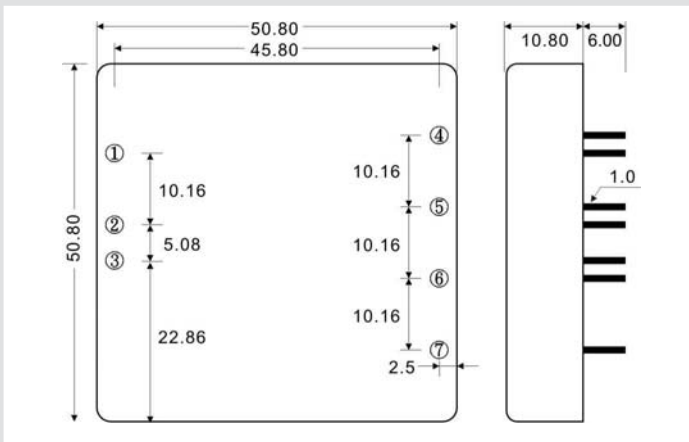
ELECTRICAL SPECIFICATIONS

Outputs	Input voltage (VDC)			Output voltage	Output current max.
	9...18V	18...36V	36...75V		
Dual output	AM20U-1205DC	AM20U-2405DC	AM20U-4805DC	±5VDC	±200mA
	AM20U-1212DC	AM20U-2412DC	AM20U-4812DC	±12VDC	±830mA
	AM20U-1215DC	AM20U-2415DC	AM20U-4815DC	±15VDC	±660mA
Triple output	AM20U-12512TC	AM20U-24512TC	AM20U-48512TC	5/±12VDC	2500/±300mA
	AM20U-12515TC	AM20U-24515TC	AM20U-48515TC	5/±15VDC	2500/±250mA

Input	Input filter	π type	
Output	Voltage accuracy	±2%	
	Line regulation (HL-LL) (typ.)	±0.5% - dual output	±1%/ ±5% - triple output
	Load regulation (10-100%) (typ.)	±3% - dual output	±3%/ ±5% - triple output
	Ripple	<0.2% Vout +20mV max (Vp-p)	
	Noise	<0.5% Vout +50mV max (Vp-p)	
	Efficiency	78... 82%	
	Switching frequency	200kHz	
Protection	Over current protection	Works over 120% of rating and recovers automatically.	
	Over voltage protection	Zener diode clamp	
	Short circuit protection	Hiccup, auto-recovery	
Isolation	Voltage	1500 VDC.	
	Resistance	10 ⁹ ohms	
	Capacitance	1000 pF	
Environment	Operating temperature	-25°C...+71°C	
	Storage temperature	-55°C...+105°C	
	Case temperature	+95°C max.	
	Temperature coefficient	±0.02% Per°C	
	Humidity	95% RH	
	MTBF	>550,000 h @ 25°C (MIL-HDBK-217F)	
Physical	Dimension (L x W x H)	2.0 x 2.0 x 0.42 Inches (50.8 x 50.8x 10.8 mm)	
	Case Material	Nickel-Coated Copper with Non-Conductive base, six-side shielded.	
	Weight	70 g	
	Cooling method	Free-air convection	
Safety	Agency approvals	CE (Pending)	
EMC	EMI (Conducted & Radiated Emission)	EN 55022 class A	

All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

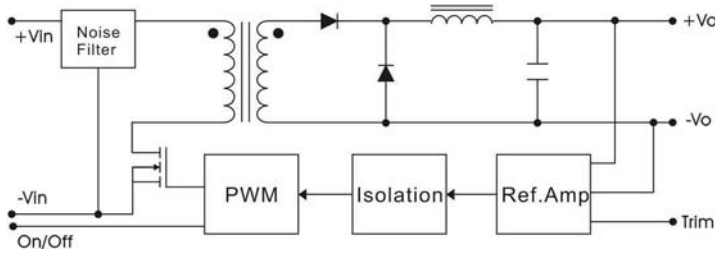
MECHANICAL DIMENSION (Top View)



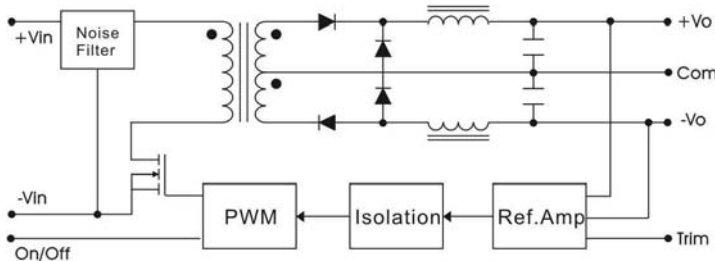
PIN#	Single	Dual	Triple
1	ON / OFF	ON / OFF	ON / OFF
2	-VIN	-VIN	-VIN
3	+VIN	+VIN	+VIN
4	TRIM	TRIM	-VOUT
5	-VOUT	-VOUT	COMMON
6	+VOUT	COMMON	+5V OUT
7	NC	+VOUT	-VOUT

BLOCK DIAGRAM

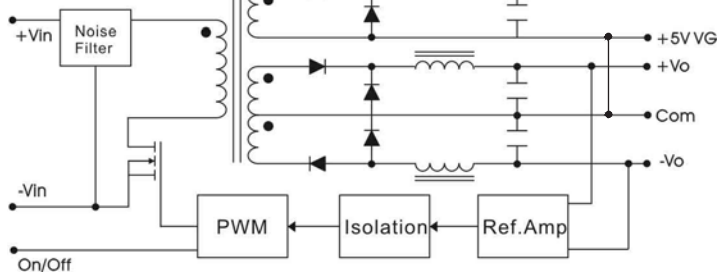
Single Output



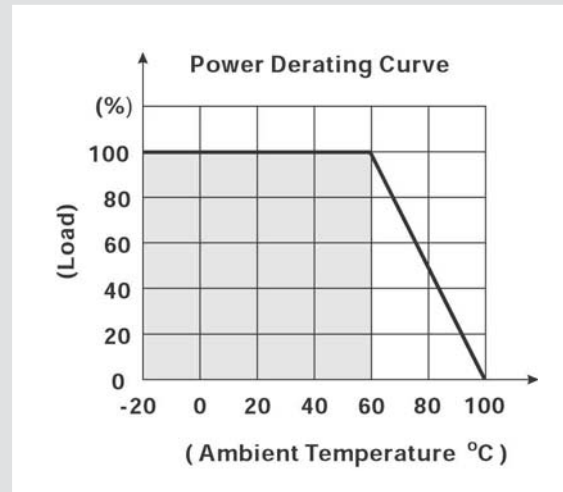
Dual Output



Triple Output



DERATING



REMOTE ON/OFF CONTROL

