12W Level VI Class II External medical power adapter — IEC 60601-1

◆ Description:

The XJKMW12M Class II 12W external AC DC medical power adapter is certified to comply with IEC 60601-1 safety standards for medical electrical equipment, ensuring high levels of safety and reliability for patient-connected devices. It is also designed to meet Level VI energy efficiency standards. With double insulation and no requirement for ground connection, it provides efficient and reliable power conversion, with off-load power consumption of less than 0.15W. This medical-grade power adapter is ideal for use in medical devices such as patient monitoring systems, diagnostic equipment, and other healthcare-related applications, ensuring safety and performance in critical environments..

◆Featues:

- Certified to IEC 60601-1 safety standard
- Meets Level VI energy efficiency requirements
- Class II double insulation, no ground needed
- Compact and lightweight design
- Low standby power consumption (<0.15W)
- Protection against over-voltage, over-current, and short circuit
- Wide operating temperature range
- Global regulatory compliance

◆Application

- Medical devices such as patient monitoring systems, diagnostic equipment, and home healthcare devices
- Hospital and healthcare equipment, including portable and stationary devices
- Medical imaging systems and laboratory instruments
- Patient care and therapeutic devices, including infusion pumps and respiratory equipment
- Critical care devices requiring high reliability and safety standards

◆ Model Naming Convention:

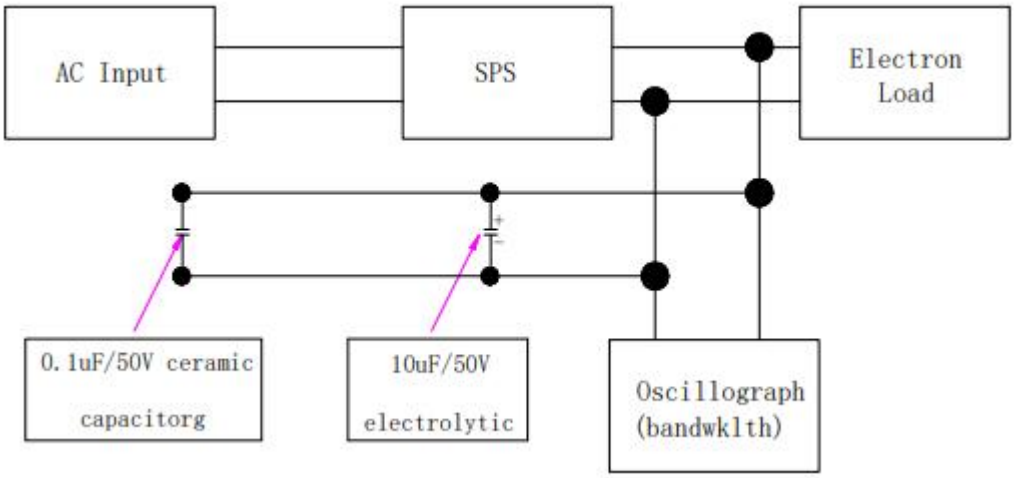
XJK	M	W	6W	120	US	xxx
Ourb rand	Series : M=ac adapter M=Medic al power supply.....	Type: W=Wa ll plug typeD =Desk top.....	Output power 6W=6w output power 36W=36w output power 45W=45w output power	Output Voltage 050=5v output voltage 075=7.5v output voltage 120=12v output voltage	Input US= us plug AU = Au plug C8 = C8 inlet for desktop ac adapter	Modified standard designator for alternative connectors, cables etc

◆ Specification

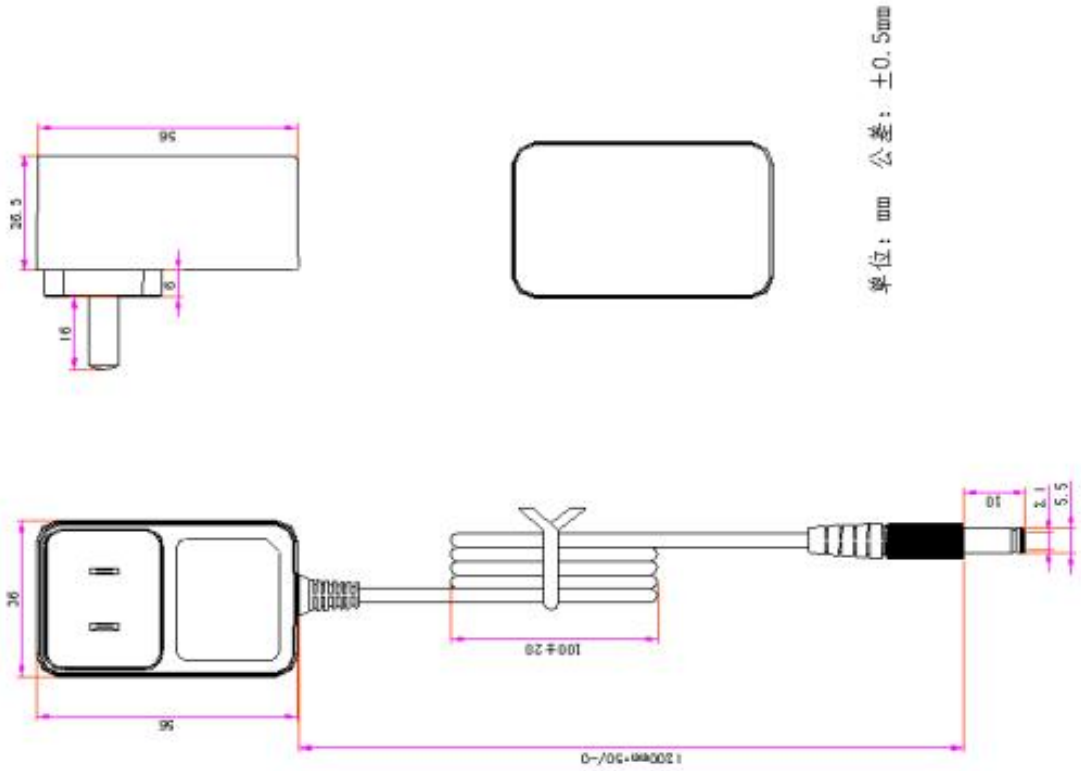
Model		XJKMW12W 050XX-xxx	XJKMW12W0 90XX-xxx	XJKMW12W0 75XX-xxx	XJKMW6W0 90XX-xxx	XJKMW6W1 20XX-xxx
Output	Rated Voltage	5V	9V	12V	15V	24V
	Rated Current	2.4 A	1.33A	1.0A	0.8A	0.5A
	Current Range	12W	12W	12W	12W	12W
	Rated Power	0.1-2.4A	0.1-1.33A	0.1-1.0A	0.1-0.8A	0.1-0.5A
	Voltage Accuracy	±2%(at 115/230Vac,60%load and 25°C ambient)				
	Ripple&Noise	130mVp-p	130mVp-p	140mVp-p	150mVp-p	150mVp-p
Input	Voltage Range	80 ~ 264VAC				
	Input Frequency	47 ~ 63Hz				
	Input Current	Max. 0.15A @ 100VAC / Max. 0.10A @ 230VAC				
	No Load Power Consumption	< 0.1W @ 230VAC				
	Efficiency	82%	85%	85%	85%	87%
Protec	Short Circuit	Auto recovery after fault condition is removed				

tion	Protection	
	Over Current Protection	Yes (optional)
	Over Voltage Protection	Yes (clamp or latch, optional)
Enviro nment	Operating Temp	-10℃~+50℃
	Storage Temp	-20℃~+85℃
	Operating Humidity	10% ~ 90% RH, non-condensing
	Storage Humidity	5% ~ 95% RH, non-condensing
	Altitude	⩽ 2000m
	MTBF	100,000 hours @ 25°C, MIL-HDBK-217F
Safety & EMC	Safety/EMC Standards	Complies with IEC 62368, EN 62368, UL 62368, GB 4943 safety standards. AC pins meet national standards (e.g., CE for EN 62368) and withstand 3000VAC. Also meets EN 55032, EN 55035, and GB 9254-1998 (CISPR 32/35) for electromagnetic compatibility. Note: AC plugs comply with corresponding national safety standards
	DC Insulation Resistance	Input to Output: ⩾ 50MΩ (measured at 500VDC) Input to Body Metal: ⩾ 50MΩ (measured at 500VDC)
	High-Voltage Test	Input to Output: 3000VAC, 5mA, 3 seconds minimum Input to Body Metal: 1500VAC, 5mA, 3 seconds minimum
	In-rush Current	Maximum 30A cold start at 240VAC input, rated load, 25°C ambient
Other	Plug/Conntor	See page 3~5; Other type available by customer requested
	Cable	See page 3~5; Other type available by customer requested
	Dimension	See page 3; Other type available by customer requested
Note	1. All specifications are measured at 230VAC input. 25°C ambient temperature, and full load unless otherwise specified. 2. Ripple & noise are measured with 20MHz bandwidth and using a 0.1μF ceramic capacitor and 47μF electrolytic capacitor in parallel across the output. 3. Tolerance includes set up tolerance, line regulation, and load regulation. 4. Specifications are subject to change without prior notice.	

◆ Test Setup for Measurement

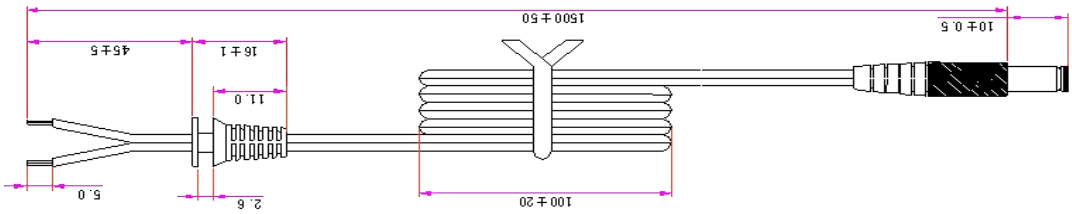


◆ Mechanical Specification

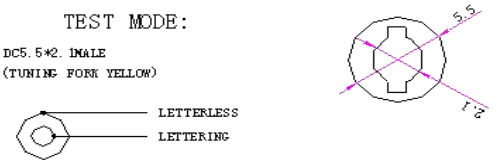


◆ DC output wire/connector

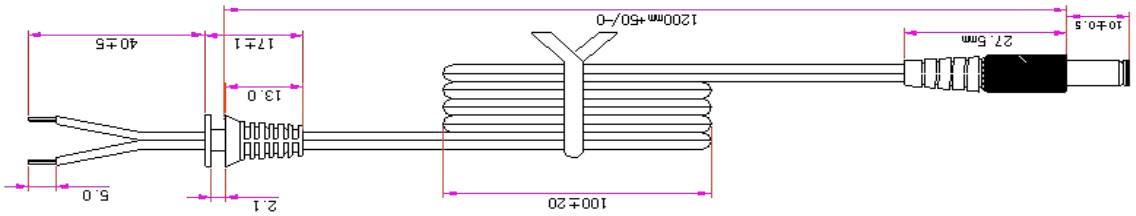
- Standard DC connector—DC5521



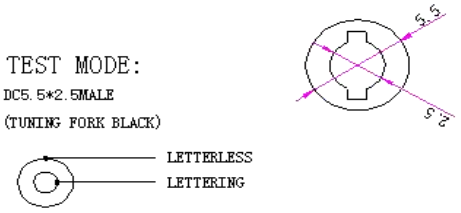
1. CORD MATERIAL:2464 AWG24*2C.
2. DC PLUG TPYE:5.5*2.1*12mm 直头音叉
3. INSULATION:PVC 3.5mdiameter
4. OUT JACKET:PVC. COLOR:Black.
5. TEMPERATURE:80° C.
6. Unit:mm

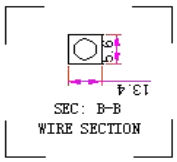


- Other optinal DC connector—DC5525

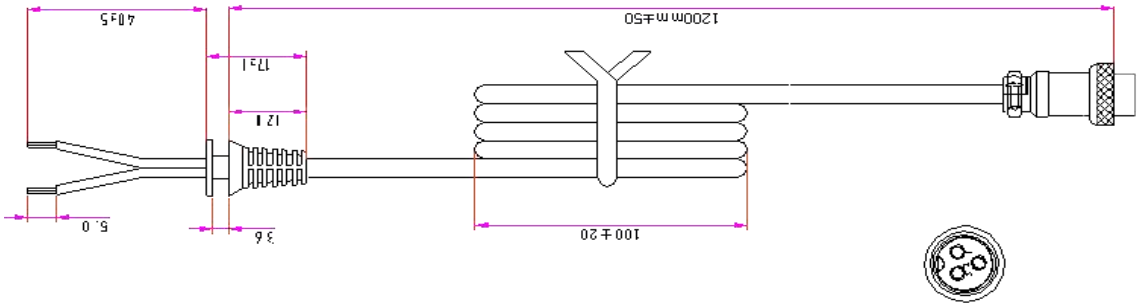


1. CORD MATERIAL:2464 AWG24*2C.
2. DC PLUG TPYE:5.5*2.5*10mm 直头音叉
3. INSULATION:PVC 3.5mm diameter
4. OUT JACKET:PVC. COLOR:Black.
5. TEMPERATURE:80° C.
6. Unit:mm



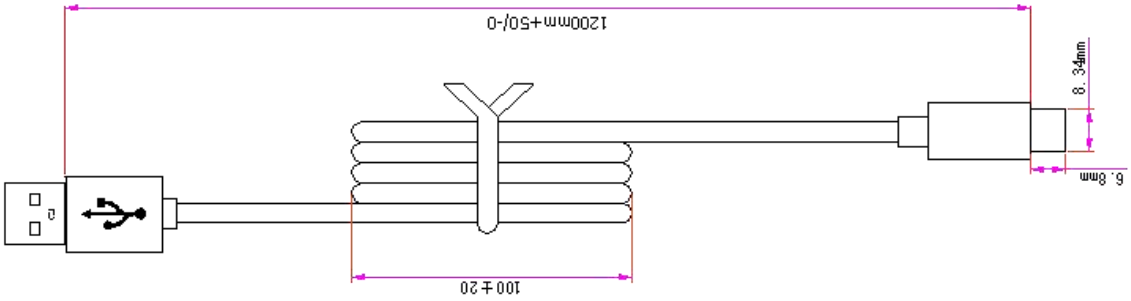


- Other optinal DC connector—AERO



1. CORD MATERIAL:2464 AWG18*2C.
2. DC PLUG TPYE:GX16-3P航空头，1脚正极，2脚负极，3接地.
3. INSULATION:PVC 4.5mm diameter
4. OUT JACKET:PVC.COLOR:Black.
5. TEMPERATURE:80° C.
6. Unit:mm

- **Other Optional DC connector—Type C**



1. CORD MATERIAL:2464 AWG22*2C.
2. DC PLUG TPYE:TPYE-C 直头
3. INSULATION:PVC 3.8mm diameter
4. OUT JACKET:PVC.COLOR:Black.
5. TEMPERATURE:80° C.
6. Unit:mm

- **More options available.....**