

# **Power Supplies PS-02/03**

Multichannel Power Supply & Probe Control Interface Ord.-No. 889-09V-PS2, 889-09V-PS3, 889-09V-PS2-L, 889-09V-PS3-L



The multi-channel power supplies PS-02 (2ch) / PS-03 (4ch) are the required power source for PMK's active probes, which have adjustment possibilities but BNC interface for universal with any oscilloscope.

In combination with the PMK Probe Control software with graphical user interface, the power supply can be used to remote control, monitor and adjust compatible PMK probes via USB or additional optional LAN interface.

Long lifetime of more than 100,000 hours in 25°C environments and great performance are ensured with its high quality components. In alignment to EN60601-1-2, the internal switch-mode power supplies are tested with 4kV AC transient overvoltage by the manufacturer and fulfill EN 55011 Class B standard for conducted EMI, ensuring highest product safety and keeping the power supplies free from interference even in rough environments, where conventional power supplies might fail.

The pin assignment of the Lemo output connector with power supply paths and I2C communication can be reviewed in the datasheet.

#### **Power Supplies PS-02/03**

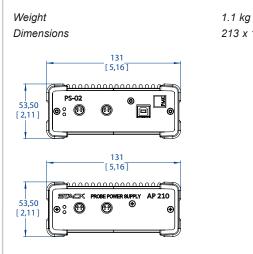


#### Datasheet

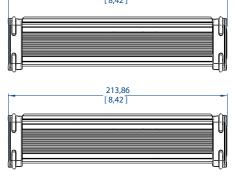
This datasheet supersedes all previously published material. Specifications that are not marked as guaranteed are published as general information to the user. The instrument should have warmed up for at least 20 minutes and the environmental conditions must not exceed the specified limits of the products. Note that specifications are subject to change without notice.

Characteristics	PS-02 (-LAN)	PS-03 (-LAN)
Number of Channels Ouput Voltage Output Current	2 ±9 V 550 mA/ Channel	4
Total Power Output	20 W	40 W
Signal Output via I2C-Bus	control signal for PMK's active	e Probes
Input Voltage Range	100-240 V AC, 47- 63 Hz, EN60950-1	
Ripple and Noise <sup>(1)</sup> (pk-pk)	8 mV	4 mV
Immunity	EN60601-1-2	
Conducted EMI	EN55011 Class B	
Withstand Voltage (input - output)	4 kV AC (Medical Safety Standards)	
External Fuse (slow blow type)	2 A	3.15 A
Cooling	convection, (passive)	

## **Mechanical Characteristics**







(1) Bandwidth 20 MHz

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#### Interfaces

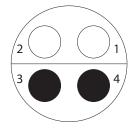
Order No.	Model	Channels	USB	LAN
889-09V-PS2	PS-02	2	yes	no
889-09V-PS2-L	PS-02-LAN	2	yes	yes
889-09V-PS3	PS-03	4	yes	no
889-09V-PS3-L	PS-03-LAN	4	yes	yes

#### Lemosa Connector Layout

PMK's PS-02 and PS-03 Power Supplies use a Lemosa connector Type 304 for Power- as well as Dataline connection. Please find the Pin Assignment below:



The power supply pin assignment is different from other power supplies. Use only original PMK power supplies with PMK probes.



PIN	Assignment
1	(-9 V)
2	(+9V)
3	SDA
4	SCL

## Scope of Delivery PS-02/03 (-LAN)

- Power Supply
- Instruction Manual
- Mains Power Cord EU
- Mains Power Cord US

# **Environmental Specifications**

Altitude	operating non-operating	up to 2000 m up to 15000 m
Temperature range	operating	-10 °C to +50 °C
	non-operating	-40 °C to +70 °C
Maximum relative humidity operat	operating	80% relative humidity for temperatures
		up to +31 °C, decreasing linearly to
		40 % at +50 °C

Please note, that the housing of PMK's PS-02 and PS-03 Power Supplies will reach a temperature of 70 °C at the surface, if used in a 50 °C environment. Please arange your workspace accordingly to avoid damage to you and your equipment.



#### Datasheet

#### **WEEE/ RoHS Directives**

PMK electronic products are classified within the WEEE/ RoHS\* category list as monitoring and control equipment (category 9). Category 9 products are exempt from the restrictions under the scope of the RoHS directive.

Your help and efforts are required to protect and keep clean our environment. Therefore return this electronic product at the end of its life either to the Service Department of PMK Mess- und Kommunikationstechnik GmbH or take care of separate WEEE collection and professional WEEE treatment yourself. Do not dispose as unsorted municipal waste.

* EC Directives:		
WEEE Directive 2002/96/EC	-	Waste Electrical and Electronic Equipment
RoHS Directive 2002/95/EC	_	Restriction of the use of certain Hazardous Substances
		in Electrical and Electronic Equipment

## **Safety Information**

To avoid personal injury and to prevent fire or damage to this product or products connected to it, review and comply with the safety informations stated in the manual before using this product. Be aware that if you use this probe assembly in a manner not specified the protection this product provides may be impaired.

Only qualified personnel should use this probe assembly.

#### Manufacturer

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