



PLACID  
MEASUREMENT  
PREAMPLIFIER /  
MICROPHONE SET

**PMNP  
21T**

# ACCURATE & STABLE

PLACID MEASUREMENT MICROPHONES

Discover a wide selection of our measurement microphones according to your sound measurement needs

**Placid Instruments BV**

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# PLACID PMNP21T

1/2" STANDARD PREAMPLIFIER / MICROPHONE SET



## SPECIFICATION



**FREQUENCY RANGE ( $\pm 1$ dB)**

20 to 8000 Hz

**FREQUENCY RANGE ( $\pm 2$ dB)**

10 to 20000 Hz

**DYNAMIC RANGE**

17 to 136 dB

**SENSITIVITY**

50 mV/Pa

The PLACID PMNP21T Measurement microphone adopts IEPE power supply mode, without polarization voltage, and complies with IEC61672 Type 1. It can be connected with IEPE power supply signal conditioner, data collector, sound level meter and other testing equipment for precise acoustic measurement, with good phase consistency, suitable for forming a multi-channel measurement system.

The PLACID PMNP21T measurement microphone includes PLACID PNP21T preamplifier and PLACID PMP21 1/2" high-quality prepolarized free field microphone capsule. The PLACID PNP21T preamplifier has built-in TEDS function, supporting data acquisition equipment to directly read microphone information, including model, serial number, sensitivity, etc. The shell of the preamplifier is made of stainless steel, which is suitable for acoustic testing requirements in many occasions.

The frequency response index of PLACID PMNP21T is strictly controlled according to the IEC standard. All microphones have passed the rigorous environmental aging test, making them have the advantages of wide frequency range, wide dynamic range, flat frequency response, long time stability, etc.



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## STANDARDS



- o IEC 61094-4:1995 Measurement microphones - Part 4: Specifications for working standard microphones
- o GB/T 20441.4-2006 Measurement microphones - Part 4: Specifications for working standard microphones
- o IEEE 1451.4

## FEATURES



- o Suitable for precise acoustic test
- o Frequency range covers most test requirements
- o Built-in TEDS function
- o Compact structure and small volume



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## SPECIFICATION



### Design

All PLACID ICCP microphone preamplifiers are designed for ¼", ½" and 1" condenser microphones.

The preamplifiers are optimized to have a flat frequency response which will ensure high quality acoustic measurements.

### Self Noise

The electrical circuit has especially been designed to ensure a low self-noise level which typically be much lower than the self-noise of the microphone cartridge.

### Daily usage

- Suitable for precise acoustic test
- Frequency range covers most test requirements
- Built-in TEDS function
- Compact structure and small volume

### PLACID PMNP21T

The frequency response index of PLACID PMNP21T is strictly controlled according to the IEC standard. All microphones have passed the rigorous environmental aging test, making them have the advantages of wide frequency range, wide dynamic range, flat frequency response, long time stability, etc.





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**DATASHEET PLACID PMNP21T**



Nominal microphone diameter	1/2"
Sound field	Free field
Microphone type	Prepolarization
Polarization voltage	0 V
Frequency range ( $\pm 1$ dB)	20 to 8000 Hz
Frequency range ( $\pm 2$ dB)	10 to 20000 Hz
Dynamic range	17 to 136 dB
Sensitivity ( $\pm 2$ dB)	50 mV/Pa
Sensitivity ( $\pm 2$ dB)	-26 dB, ref 1V/pa
Output impedance	< 110 $\Omega$
TEDS	IEEE 1451.4 V1.0 UDID= I27-0-0-0U
Temperature range	-30 to +70 $^{\circ}$ C
Temperature coefficient (- 10 ~ 50 $^{\circ}$ C)	-0.012 dB/ $^{\circ}$ C
Relative humidity range (no condensation)	0 ~ 98 %RH
Relative humidity coefficient (no condensation)	< 0.1 dB/%
Static pressure coefficient	-0.01 dB/kPa
Venting	Rear
Standard	IEC 61094-4 WS2F
Power supply	2 to 20mA(IEPE)
Typical operating current	4 mA
Output interface	BNC
Weight	35 g



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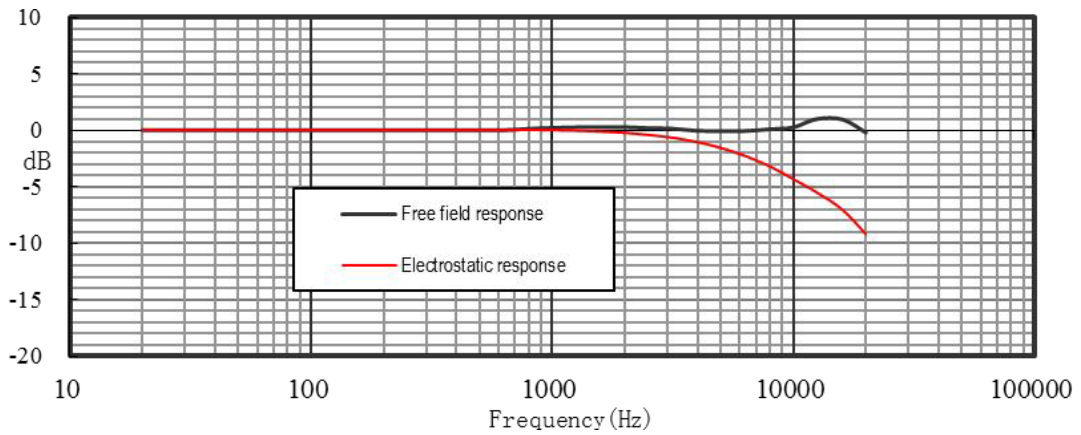
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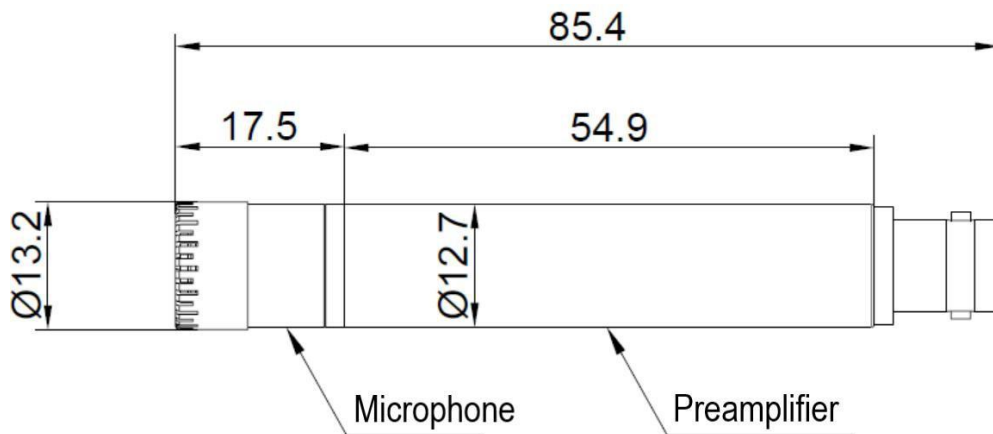
**DATASHEET PLACID PMNP21T**



FREQUENCY RESPONSE



DIMENSION





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## MAINTENANCE

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- Due to the complex and sensitive physical and acoustic characteristics of the microphone itself, please do not disassemble or modify it by yourself, which may cause irreparable damage, which is not within the warranty scope of the company
- For outdoor use, especially in the test scene with wind speed to a certain extent or sand dust, matching windscreen must be used to ensure the measurement accuracy and protect the microphone diaphragm to the greatest extent
- During daily use, attention shall be paid to ensure that the liquid will not be sprayed, submerged or dumped on the microphone, otherwise the microphone will be damaged
- Please handle with care during use. Don't beat hard or knock with other hard objects
- In case of without test, please do not put the microphone outdoors for a long time, so as not to affect their use effect. Please put the microphone into the packing box for storage in case of lightning weather or long-term non use



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