





# ACCURATE & STABLE

PLACID MEASUREMENT MICROPHONES

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

PMP 21-1

## Placid Instruments BV

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### PLACID INSTRUMENTS BV

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## PLACID PMP21-1 Measurement Microphone Set

1/2" PRE-POLARIZED FREE-FIELD MICROPHONE, WITH PREAMPLIFIER, CLASS 1



## Specification 🧥

Frequency Range 20 Hz to 20 kHz

Dynamic Range 16 to 146 dB(A)

Nominal Sensitivity
50 mV/Pa

Measurement Microphone Set

The PMP21-1 is a 1/2" pre-polarized free-field microphone, classified per IEC 61094 as WS2F Class 1 with preamplifier.





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## Specification 6

#### **Basics**

The PLACID PMP21 -1 is a high-precision condenser microphone manufactured in compliance with the IEC 61094-4 requirements and classified as a class 1 microphone. The PMP21-1 microphone is optimized for free-field measurements.

As all PLACID microphones, the PMP21-1 comes with an individually calibration certificate.

#### Connectivity

The PMP21-1 measurement microphone set includes the PMP21 microphone and the PNP21 preamplifier

#### Uses

The PMP21 -1 is a robust and stable measurement microphone set and is being used as an all-round free field measurement Microphone set suitable for laboratory as well as field jobs.

#### **Daily usage**

PLACID recommends calibration before and after each measurement with a calibrator.

#### Individual calibration

All PLACID measurement microphones set are being calibrated in a controlled laboratory environment using traceable calibration equipment complying with ISO17025 standards. We recommend that all PLACID microphones are re-calibrated every year to guarantee an optimized usage. PLACID Traceable Calibration is performed by our qualified staff and under controlled conditions according to the procedures and standards such as ISO17025

#### Quality

All PLACID microphones are made of highquality materials that will ensure long stability and durability.

The microphone diaphragm, body, and protection grid are made of high-grade stainless steel, which makes the microphone resistant to physical damage. PLACID offers 2 years warranty against defective materials and workmanship.





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## Datasheet PLACID PMP21 - 1 Measurement Microphone Set



Class / type	1	
Polarization	OV	
Frequency range	20 Hz to 20 kHz	
Dynamic range	16 – 146 dB(A)	
Nominal Sensitivity	50 mV/Pa	
Temperature range, operation	-30 – 75 Celsius	
IEC 61094 Designation	WS2F Class 1	
Humidity operating Range	0 to 90 % RH	
Ventilation	Rear	
Weight	8.9 grams	
Height	17.3 mm	





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## PLACID PNP21

1/2" STANDARD PREAMPLIFIER



## Specification 🗥

Frequency Range 5.0 Hz to 100 kHz

Noise

 $< 2.0 \mu V$ 

Usage

General purpose

The PLACID PNP21 1/2" Preamplifier is a robust preamplifier designed to be used for acoustic measurements with condenser microphones.

The self-noise is very low, it has a wide dynamic range and frequency response.





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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.

### **Impedance**

The PLACID PNP21 input impedance is over 5  $\Omega$ , the output impedance is less than 110  $\Omega$  .

## Daily usage

- General-purpose preamplifier
- High-frequency measurements
- High-pressure measurements





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## Datasheet PLACID PNP21 Preamplifier

Frequency Response (Ref. 250 Hz, 0.2 dB)	Hz	5.0 to 100 kHz
Slew Rate	V/µs	3.7
Input Impedance	GΩ	>5
Output Impedance	Ω	< 110
Max Output Voltage	Vrms	8.0
Noise (A-Weighted)	μ∨	< 2.0
Noise (Linear 20 Hz – 20 kHz)	μ∨	< 6.0
Gain	dB	- 0.27
DC – offset, minimum	V	15
DC- offset, maximum	V	24
Power Requirement	mA	ICP 2 to 20
Temperature operational range	Celcius	- 40 to 100
Temperature storage range	Celcius	-40 to 100
Humidity operational range noncondensing	% Rh	0 to 98
Output Connector Type		BNC
Diameter	Inch	1/2
Weight	Gram	25.5
Length	mm	84.5

