1/2” ICP Microphone Preamplifier
Nor1207 and Nor1207/BNC

Applications

- Microphone arrays
- Automotive
- General purpose

The Nor1207 is a low cost, general-purpose ICP®-preamplifier for 1/2” working standard prepolarized condenser microphones, designed for the most demanding use. It features a new design technology that increase the dynamic range to a value normally featured by traditional powered preamplifiers only. It is the first pattern evaluated ICP® preamplifier on the market, ensuring a high quality of the measurement in every environmental condition as specified in the class 1 requirements given in IEC-61672.

Nor1207 apply a male TNC-connector for connection to cable or instrument, while Nor1207/BNC comes with a BNC female connector.
**Technical specification**

(Data given with 3mA supply current)

The preamplifier has to be supplied by a constant current in the range 3 – 20 mA. The output voltage will be a fixed DC (about 10 volt) plus the AC-coupled input voltage. Output AC-voltage swing is minimum +/- 5 volt if not limited by the voltage for the current source.

- **Dynamic range:** > 120dB
- **Input impedance:**
  - 20 Gohm, 2.5 pF (typical) for Nor1207/BNC
  - 20 Gohm, 18 pF (typical) for Nor1207
- **Frequency response ± 0.1 dB:** (10 Hz – 20 kHz)
- **Typical attenuation with microphone Nor1228 (18pF) due to capacitive loading:** 1 dB for Nor1207/BNC
  - 6 dB for Nor1207
- **No signal DC out:** 10 ± 2 volt
- **Output impedance:** 35 ohm typical
- **Length incl. microphone Nor1228:** 96 mm

- **Diameter:**
  - Nor1207/BNC: 14.5 mm; Nor1207: 16 mm
- **Weight incl. microphone Nor1228:** 50 g
- **Power consumption:** 30 mW (dependent on supplied current)
- **EC classification:** As for Sound level meter Nor131.
- **Temperature for specified operation:** -10°C to +50°C
- **Temperature for storing:** -30°C to +70°C
- **Humidity for storing and operation:** 0 – 90% RH
- **Microphone heating:** No extra heating available
- **Max length of cable (100pF/m) with a microphone with sensitivity 50mV/Pa and 18pF capacitance (E.g. Nor1228):**
  - Below 137 dB (re. 20 µPa): 30 m, Below 130 dB: 100 m, Below 120 dB (re. 20 µPa): 300 m
- **Connector type:** Two versions available. Nor1207 with TNC connector and Nor1207/BNC with BNC jack.
- **Self noise:**

  Typical equivalent noise (level with a microphone with sensitivity 50mV/Pa and 18pF capacitance re. 20 µPa, e.g. Nor1228):
  - 2 µV A-weighted (12 dB, Max 15 dB); 2.2 µV C-weighted (13 dB).

Specifications subject to changes without notice.