

PRODUCT DATA

4-channel Microphone Power Supply — Type 2829

FEATURES

- 4 microphone inputs via LEMO sockets
- 4 outputs via BNC outlets
- Polarization voltage can be 0 V or 200 V
- Supports identification of IEEE P1451.4 transducers (TEDS)
- Supports Charge Injection Calibration tests
- Robust construction
- Stackable

BENEFITS

- Powers up to 4 microphone channels simultaneously
- Enables the functionality of the microphones and preamplifiers to be checked using CIC and TEDS



Description

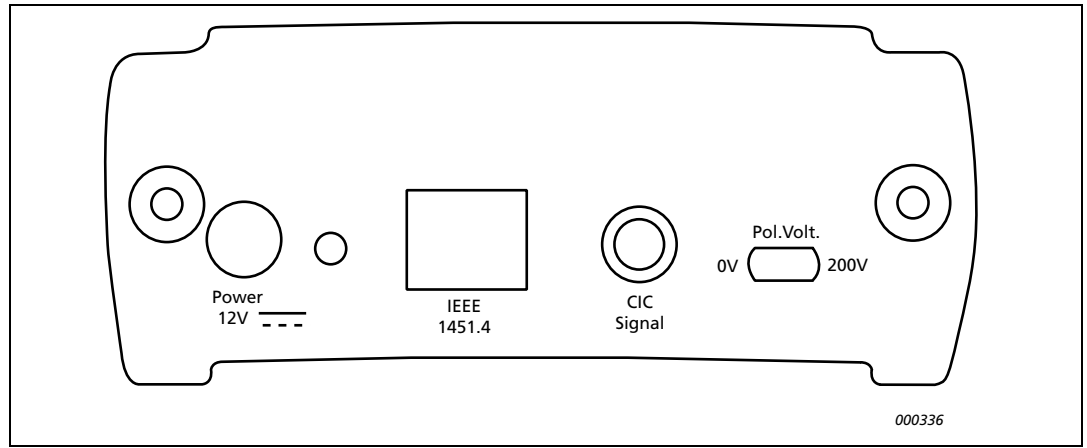
4-channel Microphone Power Supply Type 2829 is designed for acoustical systems where robustness and reliability are important. It is a simple power supply that introduces negligible noise into the measurement system. The functionality of the connected microphones and preamplifiers can be checked by the Charge Injection Calibration method. The test signal is applied to all the connected microphone and preamplifier combinations by means of the mini-jack socket on the rear panel.

Applications include the production, testing and quality control of loudspeakers and telephones. The elegant design enables several Type 2829 units to be stacked on top of one another, if necessary.

If the connected microphone/preamplifier combinations contain TEDS (Transducer Electronic Data Sheets), they can be interrogated by connecting a TEDS Editor via the four pole RJ 11 socket labelled IEEE 1451.4. Type 2829 can supply both 0 V and 200 V polarization voltage for the microphones.

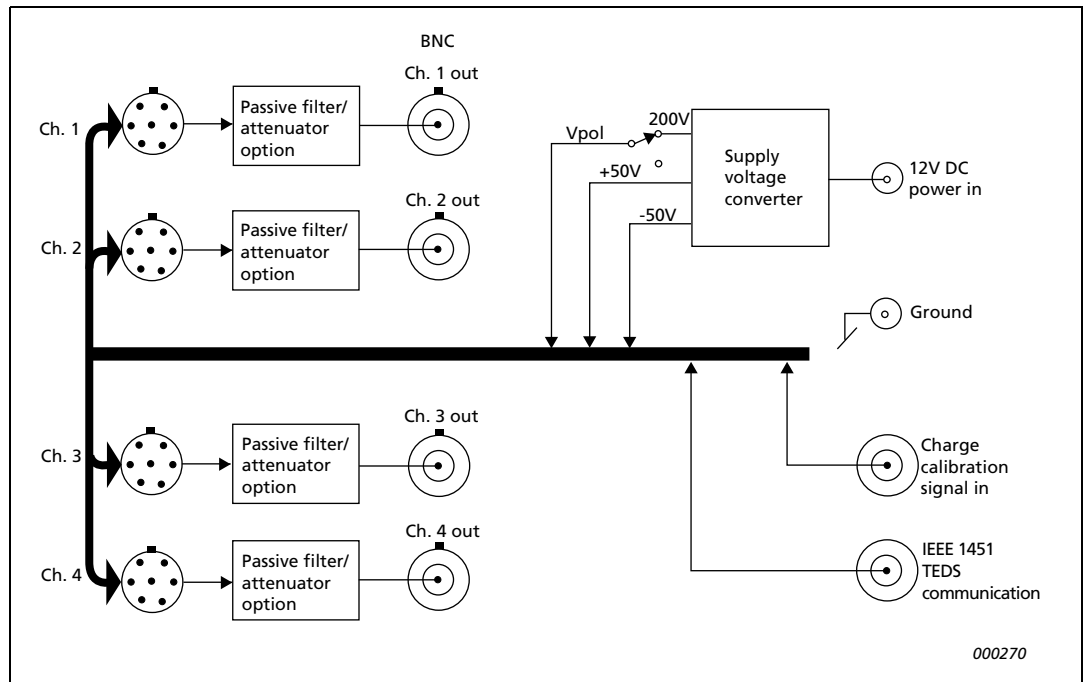
2829

Fig. 1
Rear panel view




Note that Brüel & Kjær Preamplifiers Types 2669, 2670 and 2671 are all delivered with the TEDS capability. There are over 40 microphone/preamplifier combinations available as calibrated units where the combined sensitivity is already written into TEDS.

Fig. 2
Block diagram of
Type 2829



Compliance with Standards

	CE-mark indicates compliance with: EMC Directive and Low Voltage Directive. C-Tick mark indicates compliance with the EMC requirements of Australia and New Zealand
Safety	EN 61010-1 and IEC 61010-1: Safety requirements for electrical equipment for measurement, control and laboratory use. UL3111-1: Standard for Safety – Electrical measuring and test equipment
EMC Emission	EN 50081-1: Generic emission standard. Part 1: Residential, commercial and light industry. EN 50081-2: Generic emission standard. Part 2: Industrial environment. CISPR 22: Radio disturbance characteristics of information technology equipment. Class B Limits. FCC Rules, Part 15: Complies with the limits for a Class B digital device.
EMC Immunity	EN 50082-1: Generic immunity standard. Part 1: Residential, commercial and light industry. EN 50082-2: Generic immunity standard. Part 2: Industrial environment. Note 1: The above is guaranteed using accessories listed in this Product Data sheet only. Note 2: The above is guaranteed only when the AC output is not in use.
Temperature	IEC 60068-2-1 & IEC 60068-2-2: Environmental Testing. Cold and Dry Heat. Operating Temperature: -10 to +55 °C (14 to 131 °F) Storage Temperature: -20 to +70 °C (-13 to 158 °F)
Humidity	IEC 60068-2-3: Damp Heat: 95% RH (non-condensing at 40 °C (104 °F))
Mechanical	Non-operating: IEC 60068-2-6: Vibration: 0.3 mm, 20 m/s ² , 10-500 Hz IEC 60068-2-27: Shock: 1000 m/s ² IEC 60068-2-29: Bump: 1000 bumps at 250 m/s ²
Enclosure	IEC 60529: Protection provided by enclosures: IP 41

Specifications – 4-channel Microphone Power Supply Type 2829

PHYSICAL

Dimensions (H×W×L):

232×46×106 mm (9.13”×1.81”× 4.17”)

Weight: 430 gram (15.25 oz.)

Input Socket: 4×LEMO 1B

Output Plug: 4×BNC

ELECTRICAL

Amplification: 1

Noise level: negligible

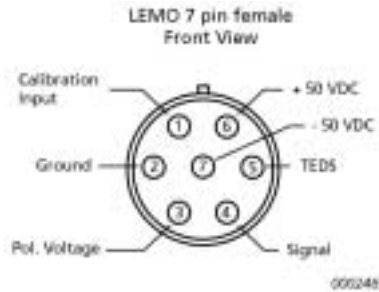
Polarization Voltage: 0 V or 200 V on all 4 channels simultaneously

Power: 12 V DC, regulated 0.5 A, tolerance ±20%, max. ripple 10 mV

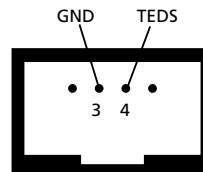
CIC Socket: Maximum input 10 V rms. Input impedance 100 kΩ, 2.5 mm mini-jack

IEEE 1451.4 Socket RJ 11: Complies with IEEE 1451.4

PIN CONNECTIONS



IEEE 1451.4 CONNECTOR "FRONT VIEW"



Ordering Information

Type 2829 4-channel Microphone Power Supply

Optional Accessories

ZG 0386	Mains Power Supply (230 V EUR)
ZG 0387	Mains Power Supply (230 V UK)
ZG 0088	Mains Power Supply((115 V US)
Type 2669 L	½" Microphone Preamplifier
Type 2670	¼" Microphone Preamplifier
AO 0481	CIC Cable, mini-jack to BNC
BZ 5294	TEDS Editor, Interface Hardware for PC Serial Port and Windows [®] NT/Windows 95 Software
UA 2019	Interface Adaptor

Brüel & Kjær reserves the right to change specifications and accessories without notice.