

[See all 13 Products in Family](#)

Single-ended, BNC Connector, Low Noise Lock-In Amplifier



#90-642 Single-ended, BNC, Lock-In Amplifier

Stock #90-642 NEW **2 In Stock**

⊖ 1 ⊕ €2.705⁰⁰

ADD TO CART

Volume Pricing	
Qty 1+	€2.705,00 each
Need More?	Request Quote

! Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:
Single-Ended

Time Constant:
3 ms – 10s

Remote Control:
Yes

Maximum Acquisition Time (s):
2 @ Fast Setting
4 @ Slow Setting

Note:
Includes:
LEMO® 3-pin connector
Datasheet

Phase Control:
0 - 360° Digital Phase Shifter

Phase Temperature Drift (°/K):
0.01

Physical & Mechanical Properties

Weight (g):
370

Dimensions (mm):
Case Size: 170 x 60 x 30

Sensor

Dynamic Reserve (dB):
Low Drift Setting: 35
High Dynamic Setting: 55

Electrical

Frequency (Hz):
10 - 45,000

Hardware & Interface Connectivity

Connector:
BNC

Power Requirement:
±15 V, 100 mA

Power Supply:
Power Supply Required and Sold Separately.
USA: [#59-180](#)
Europe: [#59-180](#)
Japan: Not Available
Korea: Not Available
China: [#59-180](#)

Environmental & Durability Factors

Operating Temperature (°C):
0 to +60

Regulatory Compliance

RoHS 2015:
[Compliant](#)

Certificate of Conformance:
[View](#)

Product Details

- Recovers Low-Amplitude, Modulated Signals from Noisy Backgrounds, Significantly Improving Measurement Sensitivity
- Compact Design Shielded for Electromagnetic Interference (EMI)
- Wide Working Frequency Range, 10Hz – 45kHz

Low-Noise Lock-In Amplifiers utilize synchronous detection to selectively amplify and extract weak modulated signals from noise. These amplifiers feature a compact, 170 x 60 x 30mm form factor and an EM-shielded design that enables seamless integration into OEM systems or placement close to the signal source for optimal performance. With a broad operating frequency range from 10Hz to 45kHz, they support a wide range of modulation and measurement techniques. Low Noise Lock-In Amplifiers' adjustable phase, sensitivity, and time constants give users precise control to fine-tune measurements for maximum accuracy. These lock-in amplifiers are ideal in applications such as spectroscopy, laser stabilization, optical sensing, and other precision scientific or industrial measurement systems.

Note: Power supply sold separately. Please see specifications for more details.