NI-9770 Getting Started

2025-03-22

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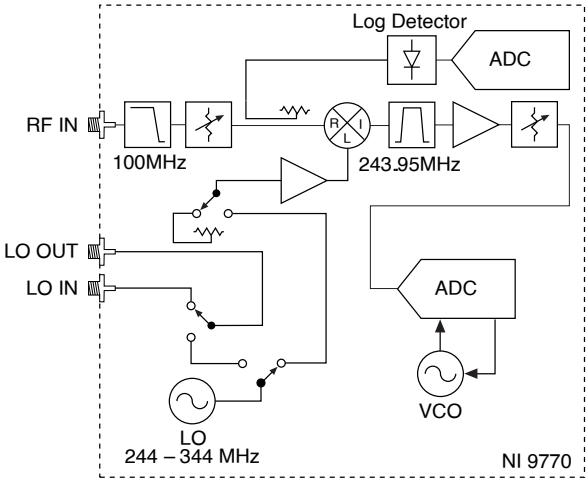
NI-9770 Block Diagram

The RF IN signal of the NI-9770 is filtered, mixed, and then sampled by a 16-bit IF digitizer. The LO IN and LO OUT connectors provide local oscillator signal sharing between modules to enable phase coherency.



NI-9770 Pinout

The NI-9770 provides connections for one RF input, one local oscillator input, and one local oscillator output.

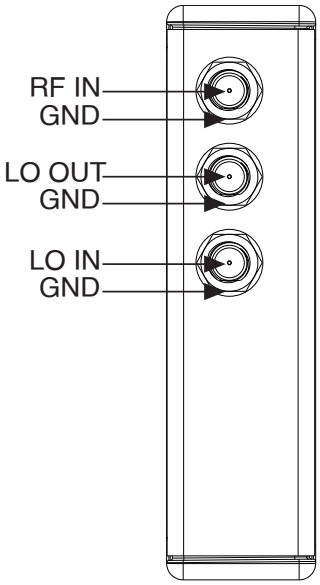


Table 1. NI-9770 Connector Descriptions

Connector Name	Use
RF IN	Connects the analog RF input signal to the NI-9770.
LO OUT	Exports the LO signal between multiple NI-9770 receivers for applications that require precise synchronization.
LO IN	Imports the LO signal between multiple NI-9770 receivers for applications that require precise synchronization.

Note To avoid spurious readings, do not connect any cable to the LO OUT and LO IN connectors when operating the NI-9770 as a standalone module.

Connecting the NI-9770 to a Device Under Test

You can connect the NI-9770 to the equipment under test through a current transformer. The current transformer provides electrical isolation between the equipment under test and the NI-9770 and allows the NI-9770 to measure high-frequency currents flowing into the ground connection of the equipment under test.

Note You must use a coaxial cable with an SMA connector to connect to the NI-9770.

Figure 1. Connecting a Current Transformer to the NI-9770