

# 17xx Clamp Adapter

## BNC Adapter for Clamps

### Instructions

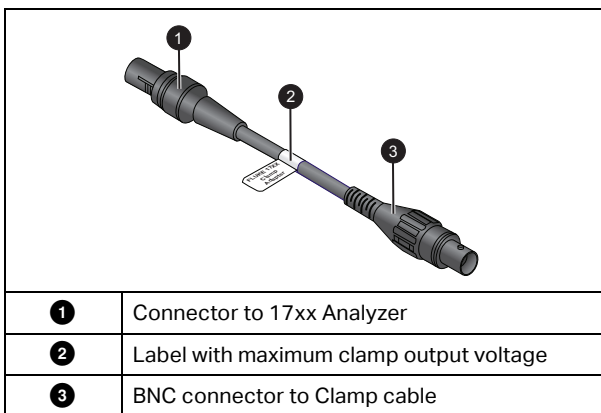
#### Introduction

The 17xx Clamp Adapter is an accessory for the 17xx-series of Power Quality Analyzers. Use the adapter to connect the current clamp with the BNC connector to the 17xx Analyzer.

This adapter is ready-to-use for all clamps with a ratio of 1 mV/A. Select the adapter version depending on the voltage output of the clamp:

- Maximum 1 V: Supports clamps with a range from 0.2 A RMS to 1000 A RMS or up to  $\pm 1500$  A DC
- Maximum 2.8 V: Supports clamps with a range from 4 A RMS to 2800 A RMS or up to  $\pm 4000$  A DC

See [Supported Clamp Models](#) for the required measurement configuration on the 17xx Analyzer and a clamp with a ratio other than 1 mV/A.



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## Safety Information

A **Warning** identifies hazardous conditions and procedures that are dangerous to the user. A **Caution** identifies conditions and procedures that can cause damage to the Product or the equipment under test.

### Warning





**To prevent possible electrical shock, fire, or personal injury:**

- **Read all safety information before you use the Product.**
- **Do not alter the Product and use only as specified, or the protection supplied by the Product can be compromised.**
- **Comply with local and national safety codes. Use personal protective equipment (approved rubber gloves, face protection, and flame-resistant clothes) to prevent shock and arc blast injury where hazardous live conductors are exposed.**
- **Do not use the Product around explosive gas or vapor.**
- **Do not touch voltages >30 V ac rms, 42 V ac peak, or 60 V dc.**
- **Before each use, examine the Product. Look for cracks or missing pieces of the connectors or cable insulation. Also look for loose or weakened components.**

- Do not use a current measurement as an indication that a circuit is safe to touch. A voltage measurement is necessary to know if a circuit is hazardous.
- Have an approved technician repair the Product.
- Remove the input signals before you clean the Product.
- Do not apply more than 5 Vpk to the adapter
- Use the product only with compatible current clamps. See [Supported Clamp Models](#).

## Symbols

The table below lists the symbols that can be used on the Product or in this document.

| Symbol  | Description  |
|---|--|
|    | Consult user documentation.  |
|    | WARNING. RISK OF DANGER.   |
|    | WARNING. HAZARDOUS VOLTAGE. Risk of electric shock.  |
|  | This product complies with the WEEE Directive and its marking requirements. The affixed label indicates that you must not discard this electrical/electronic product in domestic household waste. Do not dispose of this product as unsorted municipal waste. For information about take-back and recycling programs available in your country, see the Fluke website. |

## Supported Clamp Models

| Sensitivity  | Range                  | Adapter | Scale Factor | Range |
|--|------------------------|---------|--------------|-------|
| <b>i1000s AC</b>                                   |                        |         |              |       |
| 100 mV/A   | 0.1 A to 10 A          | 1 V     | 0.01:1       | Auto  |
| 10 mV/A  | 0.1 A to 100 A         |         | 0.1:1        |       |
| 1 mV/A   | 1 A to 1000 A          |         | 1:1          |       |
| <b>i3000s AC</b>                                   |                        |         |              |       |
| 10 mV/A  | 1 A to 30 A            | 1 V     | 0.1:1        | Auto  |
| 1 mV/A   | 1 A to 300 A           |         | 1:1          |       |
| 0.1 mV/A   | 1 A to 3000 A          |         | 10:1         |       |
| <b>i310s AC/DC<sup>[1]</sup></b>                   |                        |         |              |       |
| 10 mV/A  | 30 A                   | 1 V     | 0.1:1        | Auto  |
| 1 mV/A   | 300 A                  |         | 1:1          |       |
| <b>i400s AC</b>                                    |                        |         |              |       |
| 10 mV/A  | 0.5 A to 40 A          | 1 V     | 0.1:1        | Auto  |
| 1 mV/A   | 5 A to 400 A           |         | 1:1          |       |
| <b>80i-110s AC/DC<sup>[1]</sup></b>                |                        |         |              |       |
| 100 mV/A   | 0.1 A to 10 A          | 1 V     | 0.01:1       | Auto  |
| 10 mV/A  | 0.1 A to 100 A         |         | 0.1:1        |       |
| <b>80i-2010s AC/DC<sup>[1]</sup></b>               |                        |         |              |       |
| 1 mV/A   | 2000 A                 | 2.8 V   | 1:1          | Low   |
| <b>i200s AC</b>                                    |                        |         |              |       |
| 10 mV/A  | up to 200 A<br>+10 %   | 2.8 V   | 0.1:1        | Low   |
| <b>i30s AC/DC<sup>[1]</sup></b>                    |                        |         |              |       |
| 100 mV/A   | up to 28 A<br>+10 % DC | 2.8 V   | 0.01:1       | Low   |
| <b>i5s AC</b>                                      |                        |         |              |       |
| 400 mV/A   | 5 A                    | 2.8 V   | 0.0025:1     | Low   |
| [1] DC is only supported by the 177x PQ Analyzers. |                        |         |              |       |

# Instructions

## Note

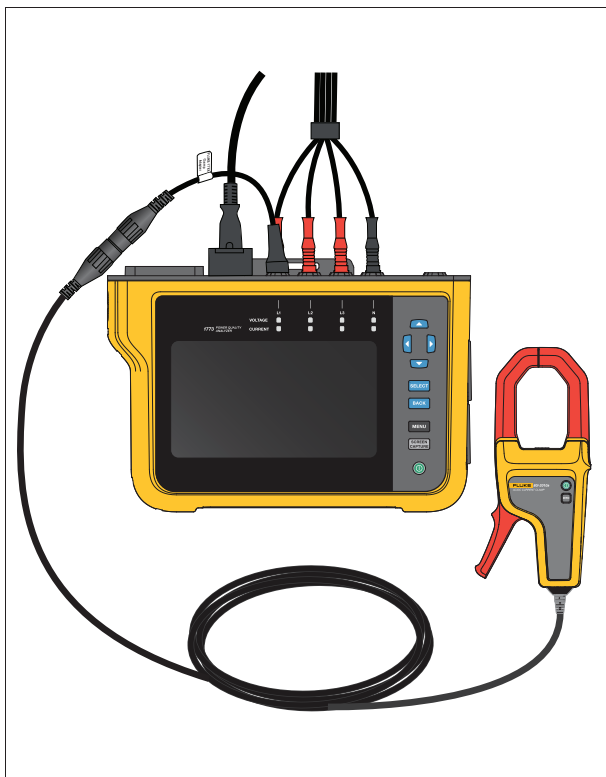
*The adapter is compatible only with clamps. Flexis, such as the i430-Flexi-TF-II, are not supported.*

To use:

1. Connect the adapter to the clamp and attach the adapter to the 17xx Analyzer.
2. Apply the required scaling factor and range that is specific for the attached clamp.

## Note

*Fluke strongly recommends to use the low range with the 2.8 V adapter. The higher range may distort the signal.*



## Specifications

|                          |  |
|--------------------------|--|
| Cable length .....       | 175 mm   |
| Connectors.....          | BNC female to 4-pin connector<br>for current input of Fluke 17xx<br>series                   |
| Temperature              |  |
| Operating .....          | -25 °C to +70 °C<br>(-13 °F to +158 °F)  |
| Storage .....            | -40 °C to +80 °C<br>(-4 °F to +176 °F)   |
| Humidity .....           | 15 % to 85 %, noncondensing  |
| Operating Humidity ..... | ≤90 % RH (at 10 °C to 30 °C)<br>≤75 % RH (at 30 °C to 40 °C)<br>≤45 % RH (at 40 °C to 50 °C) |

### LIMITED WARRANTY

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