



# CA10 ProBus Current Adapter

## Key Features

- Provides ability for third party current sensor to operate like a Teledyne LeCroy probe
- Programmable EEPROM for saving third party current sensor parameters
- Allows for addition of shunt resistor and RLC filter components
- ProBus Active interface with automatic scaling in A/div
- Easy to use, saves time and possible errors

The CA10 is a programmable and customizable interface device that seamlessly incorporates third party current transducers/transformers with Teledyne LeCroy oscilloscopes or motor drive analyzers. The easy to use interface provides the ability for the CA10 to be programmed to contain the specifications of the current sensor allowing it to automatically correct for the gain or attenuation and display results in Ampere units. This allows the third party device to be recognized and operate as if it were a Teledyne LeCroy probe.

## Measurement Flexibility

The CA10 ProBus Current Adapter provides complete flexibility in current measurements by allowing a wide variety of third party current transducers and transformers to be easily incorporated with a Teledyne LeCroy oscilloscope or motor drive analyzer. Examples of devices that can be used with the CA10 include Pearson Current Transformers, Danisense/LEM Current Transducers, PEM-UK Rogowski Coils, or any conventional turns-ratio current transformers. Once the CA10 is programmed, the third party transducer/transformer will be recognized and operate like a Teledyne LeCroy probe.

## Power of Customization

The CA10 provides the ability to easily install physical hardware components such as shunt resistors and bandwidth filter components based on the requirements of the device being used. The CA10 also has programmable bandwidth limit filters of full BW, 200 MHz, or 20 MHz.

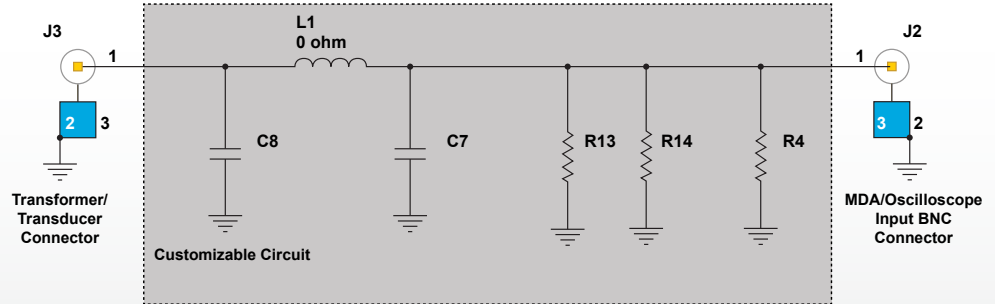
## Easy to Use

The programmable interface is intuitive and easy to use. Once the CA10 is configured, it will recognize the third party device with the correct scaling factors on any compatible Teledyne LeCroy oscilloscope or motor drive analyzer. This saves time and possible errors involved in manually entering scaling factors each time the device is connected.

# SPECIFICATIONS AND ORDERING INFORMATION

## Customizing the CA10

It is possible to customize the CA10 through the addition of shunt resistors and other bandwidth filtering components. A schematic of the user-installable components is shown here. The CA10 comes from the factory with a 0Ω (short) installed in the L1 location, and no components in the other locations shown.



**CAUTION:** The secondary of a current transformer (CT), when unterminated, can generate hazardous open circuit voltages when energized. These voltages could be dangerous to personnel and damage the oscilloscope. If the CA10 is used with an unterminated current transformer, you must install a suitably rated terminating resistor in the CA10 before energizing the CT. Download the CA10 ProBus Current Adapter Operator's Manual from [teledynelecroy.com](http://teledynelecroy.com) for customization instructions.

## Specifications

Input Coupling	DC, AC, Both
Input Termination	1MΩ or 50Ω
Programmable Bandwidth Filters	Full, 200 MHz, 20 MHz
Transformer/Transducer Interface	BNC
Scaling Factors	Programmable
Resistive Termination (if required)	Customizable (see Customizing the CA10 figure above)
Oscilloscope Interface	Teledyne LeCroy ProBus

*Note: Some third party devices will require a separate power supply or batteries. The CA10 does not have the ability to supply the power to these devices.*

## Ordering Information

Product Description	Product Code
ProBus Current Adapter	CA10
Set of 4 CA10, ProBus Current Adapter	CA10-QUADPAK

### Included with Standard Configuration CA10

Description	Qty
CA10 ProBus Current Adapter	1
Heat-Shrink tubing (6" length)	1
Removable Labels (sheet of 20)	1

### Included with Standard Configuration CA10-QUADPAK

Description	Qty
CA10 ProBus Current Adapter	4
Carrying Case	1
Heat-Shrink tubing (24" length)	1
Removable Labels (sheet of 20)	4

## Customer Service

Teledyne LeCroy oscilloscopes and probes are designed, built, and tested to ensure high reliability. In the unlikely event you experience difficulties, our digital oscilloscopes are fully warranted for three years and our probes are warranted for one year. This warranty includes:

- No charge for return shipping
- Long-term 7-year support
- Upgrade to latest software at no charge



1-800-5-LeCroy  
[teledynelecroy.com](http://teledynelecroy.com)

Local sales offices are located throughout the world.  
Visit our website to find the most convenient location.



CA10 ProBus current adapter attached to a Danisense Current Transducer. Also shown is a Pearson Current Transformer and a PEM-UK Rogowski Coil, which are also third party devices that can be used with the CA10.

## Compatibility\*

HDO4000  
HDO6000  
HDO8000  
MDA800  
WaveRunner 6 Zi  
WaveRunner HRO 6Zi  
WavePro 7Zi/Zi-A  
WaveMaster 8 Zi/Zi-A/Zi-B  
LabMaster 9 Zi-A

\* The CA10 requires the Teledyne LeCroy oscilloscope to be running firmware version 7.8.x or greater.