ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Keyence CU-21TA* at our website: ***Click HERE***

Control Units

CU Series

Features

- Compact power supply units
- Built-in logic control function
- Designed for photoelectric and proximity sensors
- Built-in multi-mode timer (CU-21TA)



Description

Compact

Although extremely small, these units supply a large electrical current (200 mA) and are suitable for DIN-rail mounting.

CU-21TA equipped with multi-mode timer function

There are three modes to choose from: ON-delay, OFF-delay, and One-shot. A selector (DIP switch) allows easy signal inversion.

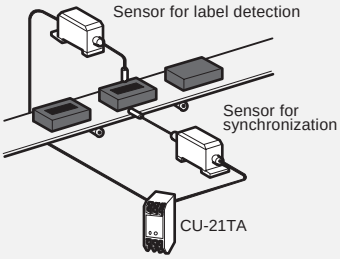
Edge-synchronous function

KEYENCE's original circuitry enables the rising or falling edge of the sensor's input signal to be identified and used as a synchronous input.



Application of edge-synchronous function

Detection of labels



The CU-21TA (synchronous mode) allows synchronization with only one edge-detecting sensor rather than the two sensors previously required.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

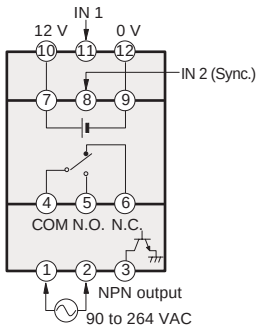
Specifications

Type		Multi-functional	Standard
Model		CU-21TA	CU-21A
DC output		12 VDC±10%, 200 mA max.	12 VDC±10%, 200 mA max.
Input	No. of inputs	2	2
	Input system	Transistor (via NPN output device), contact (via limit switch/microswitch, etc.)	
	Minimum input time	0.5 ms[1.]	5 ms[2.]
Control output	Relay contact	250 VAC 2A SPDT (1c) (resistive load)	250 VAC 2A SPDT (1c) (resistive load)
	Transistor[3.]	NPN: 100 mA (40 VDC) max.[4.]	—
Timer	Timer mode	ON-delay, OFF-delay, One-shot, timer OFF (selectable)	—
	Timer period	0.05 to 1 s/0.5 to 10 s (selectable)	—
Other functions		Input signal inversion, edge sync./level sync. selectable, AND logic	AND logic
Operation mode		Timer, standard, synchronous	Standard, synchronous
Power supply		90 to 264 VAC, 50/60 Hz	90 to 264 VAC, 50/60 Hz
Power consumption		7 VA max.	7 VA max.
Ambient temperature		-10 to +50°C	-10 to +50°C
Weight		Approx. 120 g	Approx. 105 g

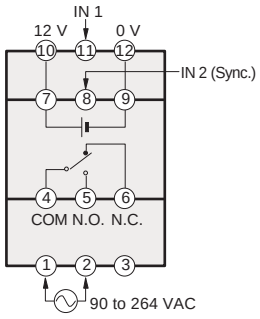
1. Required off time: 1.5 ms minimum.
2. Required off time: 15 ms minimum.
3. NPN output can easily be converted to PNP output by connecting the optional OP-5148 PNP output converter.
4. With overcurrent protective circuit.

Connections

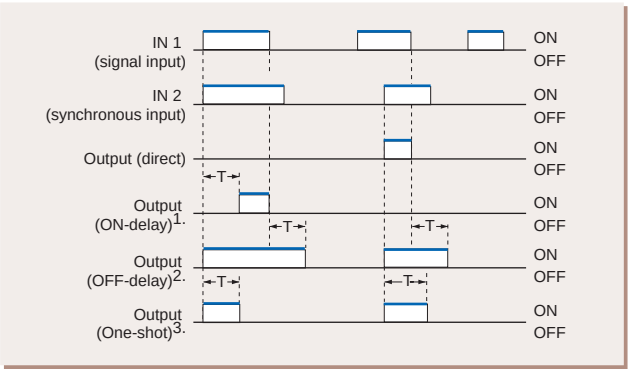
CU-21TA



CU-21A



Timing Chart



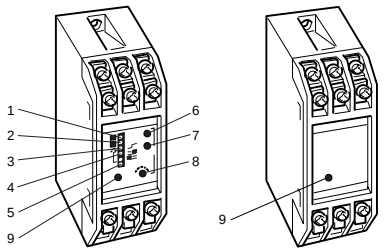
1. Outputs for T seconds after the rising edge of the AND (IN1 and IN2) output, and turns off at the falling edge of the AND output.

2. Continues output for T seconds after the AND (IN1 and IN2) output turns off.

3. Outputs for T seconds after the rising edge of the AND (IN1 and IN2) output.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Part Names and Functions



1 Signal input selector
(NOR.: Inputs when ON; INV.: Inputs when OFF)

2 Synchronous input selector
(NOR.: Inputs when ON; INV.: Inputs when OFF)

3 Synchronous edge detection selector

3 Synchronous edge detection selector	2 Synchronous input selector	
	NOR. INV.	NOR. INV.

(Thick line indicates synchronous input periods.)

4 Mode selector
a: ON-delay mode
DIR. Outputs after a fixed period.
b: OFF-delay mode
DIR. Continues output for a fixed period after the detection signal goes off.
c: One-shot mode
DIR. Outputs for a fixed period after the rising edge of the detection signal.

5 Timer period selector
1s: variable between 0.05 and 1 second
10s: variable between 0.5 and 10 seconds

6 Timer setting trimmer

7 Signal input indicator

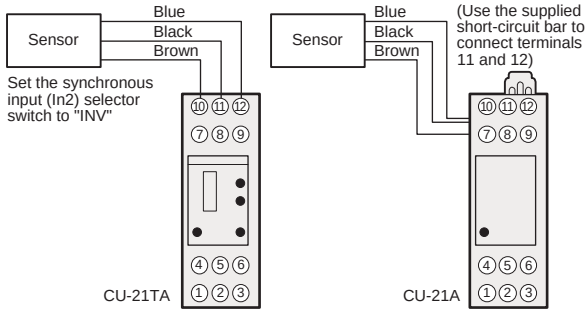
8 Synchronous input indicator

9 Output indicator

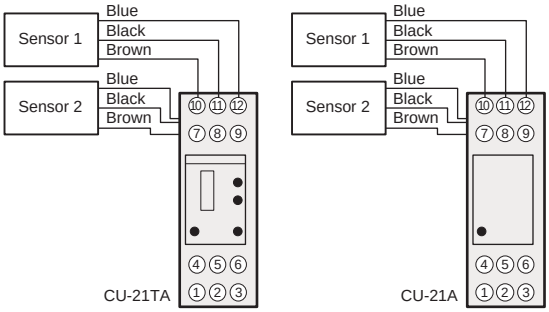
Connections

Connecting 3-wire sensor(s)

Connecting one sensor to the CU

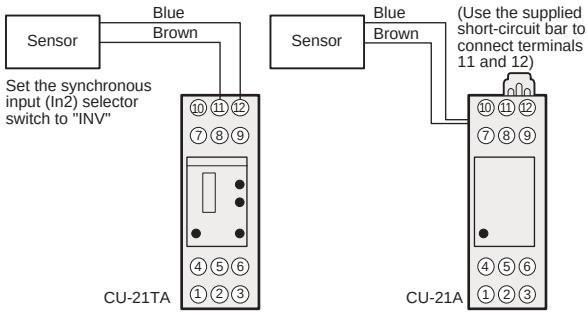


Connecting two sensors to the CU in an AND logic

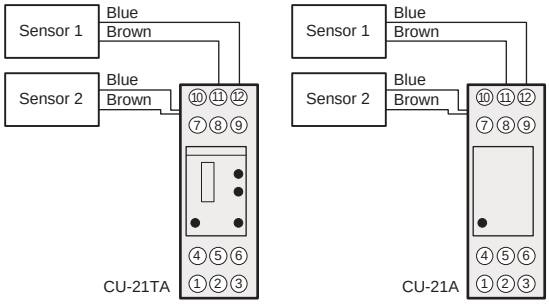


Connecting 2-wire sensor(s)

Connecting one sensor to the CU

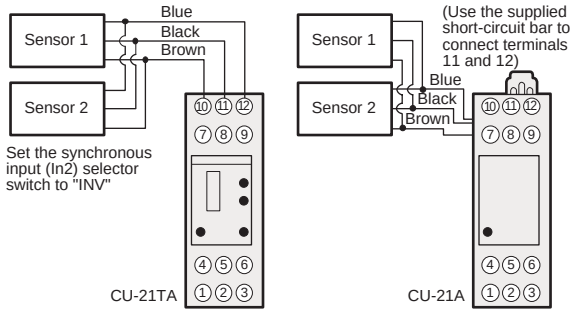


Connecting two sensors to the CU in an AND logic



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Connecting two or more sensors to the CU in an OR logic

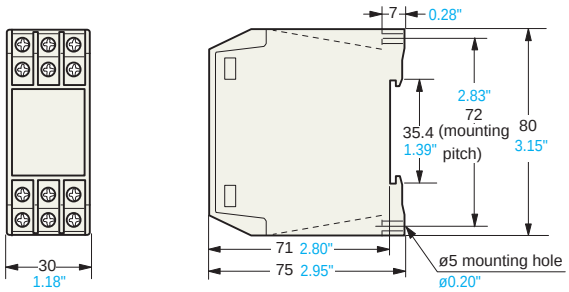


Dimensions

CAD data

CU-21TA/CU-21A

Unit: mm Inch



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP