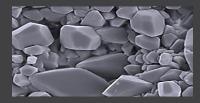
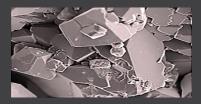


UC21114









UNIVERSAL COINCIDENCE MODEL UC2114







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# UNIVERSAL COINCIDENCE MODEL UC2114

# **Features**

- Connectors signal input: five front panel BNC connector.
- Connectors signal output: one front and one rear panel BNC connector.
- Amplitude: accept +4 to +10 V pulses.
- Provides coincidence determinations using majority logic.
- Five, positive-polarity, DC-coupled inputs.
- Coincidence, anticoincidence, or off selectable for each input.

- Excellent temperature stability.
- High stability.
- Continuous operation under severe environmental condition.
- Special rugged design, waterproof against streaming water and fully dust protected.
- Operation in a wide temperature range.
- Ultra reliable industry standard design.

FIVE, POSITIVE-POLARITY
&
DC-COUPLED INPUTS



#### **Description**

The UC2114 manufactured by Control Farayand Pasargad (CFP) is a universal coincidence unit with five DC-coupled inputs. Each input is accepted through a convenient front-panel connector. Input A accepts an input signal with a width of 50 ns or more and regenerates an internal signal for coincidence comparisons. The input A signal width is adjustable for a resolving time of 100 ns to 2 µs and this range is available with a front-panel control. The function of each input is selectable and its signal can be used for coincidence or anticoincidence or can be disabled. This permits various combinations of input signal relations to be selected without adding or removing cables in the system. Another feature that simplifies operating flexibility without changing any cables is a selectable number of inputs that are required to satisfy a coincidence. For example, if the selector is set at 2, an overlapping between any two selected inputs for the coincidence function will cause to generate an output. If any one or more inputs are selected for anticoincidence, all outputs are inhibited while such signals are present. Any combination of input signal effects can be selected easily at the front-panel.

#### **Specifications**

#### Input(s)

Input power

UC2114 powered from a standard NIM bin and power supply.

#### INPUT (A,B,C,D,E)

POLARITY: +2 V minimum, 30 V maximum

Pulse width: 50 ns to DC Connectors: BNC on front panel Input impedance <1.5 ku, DC-coupled

#### Output(s)

# OUTPUTS

Amplitude: +5 V Pulse width: 500 ns

Connectors: BNC on front and rear panels Output impedance <10  $\Omega$ , DC-coupled

#### Control(s)

# Coincidence requirements

Selects number of inputs necessary to satisfy a coincidence requirement (majority logic).

# Input controls

Five 3-position toggle switches select Coincidence, Anticoinci dence, or Off (disabled).

# Indicator(s)

No indicator

#### Performance

#### Input A resolving time

100 ns to 2  $\mu s;$  controlled by a front-panel, 20-turn, screwdriver adjustable potentiometer; inputs B, C, D, and E controlled by input pulse width.

#### Temperature instability

Input A

Change in resolving time,  $\tau < \pm 0.1\%$ /°C.

Inputs B, C, D, E

Change in resolving time,  $\tau < \pm 0.5\%$ /°C for  $\tau = 500$  ns.

Operating temperature

0 to 50°C

## **Application**

- Spectroscopy.
- Educational, scientific and research centers.
- General laboratory usage.



# **Electrical and Mechanical**

#### Power required

Its power from a NIM bin power supply. Required DC voltages and currents are +12V, 50mA; -12V, 30mA; +24V, 105mA and -24V, 90mA.

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Physical		
Dimensions (L x W x H)	220mm x 34mm x 248mm	
Weight	1.3 kg	
Storage temperature	- 40°C to + 85°C	
Operating temperature	0°C to +50°C	
Relative humidity	< 80%	
شکل مکانیکی گذاشته شود		

UC2114 mechanical dimensions.

# Software and user interface

The device doesn't have any software.

# Ordering info

# **UC2114 Standard package includes**

Part #	Image	Description
UC2114 main		Universal coincidence model UC2114.
ACCE2114001	Carlos Ca	CD user guide (1 Pack).
ACCE2114002		Box with foam insert.
ACCE2114003*		Guaranty (one year).

<sup>\* =</sup>we stand behind our products. We guarantee your satisfaction in the quality of our instruments by providing a complete one-year warranty covering any defect of workmanship, material, and/or design. If our products do not perform, we will provide complete repair and/or replacement. for guaranty conditions, please refer to manual device (UC2114 - Manual).

# Optional accessories and services

Part #	Image	Description
ACCE2114004		Installation.
ACCE2114005		Training.
ACCE2114006		BNC terminator 50 $\Omega$ .
ACCE2114007		RG58A/U, 50 $\Omega$ cable with two BNC male plugs.
ACCE2114008	3 - 3 2 - 3 3 - 3 3 3 - 3 3 -	Conn housing plug 50POS AMP connectors.
ACCE2114009		Conn pin hood int 50pos panel MT.
ACCE2114010	O C	Guide pin 4-40.
ACCE2114011		TE connectivity AMP connectors multimate, type II series pin.
ACCE2114012		Bin guide pin.
ACCE2114013	a di	Guide socket.

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ACCE2114014\*\*



Re-calibration (interval) services.

(1 year factory maintenance suggested, not required)

<sup>\*\* =</sup> The proper maintenance & calibration of your instruments is critical to ensure proper performance & accuracy. for Re-calibration (interval) services, please call with CFP company (021- 4604538).



WWW.CFP.CO.IR NIM MODULES



Innovator in Spectroscopy Equipment



Unit 10, No 64,Vahedi (7)St, After Punak Sq, Ashrafi Esfahani Expy, Tehran, Iran



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