

# UDC-IC

## 10 Mhz Clock Converter



### FEATURES / BENEFITS

- ✓ Interface – 50 Ohm BNC
- ✓ Input - Single 10 Mhz Sine Wave
- ✓ Output - Four Ports, 10 Mhz Square Wave
- ✓ One In, Four Out Converter / Splitter
- ✓ Low Signal Level Detector Circuit
- ✓ 110/220VAC or DC Voltage Supply Option
- ✓ CE Approved, RoHS Compliant
- ✓ Sturdy Aluminum Enclosure

### DESCRIPTION

The **UDC-IC 10 MHz Clock Converter** is intended to accept a standard 10 MHz sinusoidal reference signal, convert it to a typical 5V TTL-level output, and distribute this output to 4 separate devices over individual coax cables.

Each cable driver element is designed to launch a signal through a 50-ohm series termination. With a single high-impedance load at the end of the 50-ohm cable, the load will see the incident signal as a square wave. Reflections back to the source are absorbed for the most part by the series termination in combination with the low-impedance driver.

If the 10Mhz Input Sine Wave is within tolerance, the front panel **CLK** and **DCD** LED Indicators will be green. If the 10Mhz Input signal is out of tolerance the **CLK** and **DCD** LED indicators will **not be illuminated**.

The 10MHz receiver card is also equipped with a **low signal level detector circuit** that cuts off the converter to prevent compromised clock signals from reaching downstream equipment. This will normally happen when the input signal falls below the minimum +5 dBm level. The front panel indicator, **DCD** will be on when an input signal of sufficient level is seen, and off when the cut-off circuit senses a low level or absent input.

The UDC-IC 10Mhz Clock Converter is simple to use by connecting a 50-ohm Coax Cable to the **10Mhz Sine Wave INPUT** marked **PORT B** located on the rear panel. Then connect from one to four 50-ohm Coax Cables to the OUTPUT ports 1-4 located in PORT A.

The front panel LED marked PWR, CLK and DCD should be illuminated. If the CLK and the DCD LED's are not illuminated, the UDC-IC 10Mhz Clock Converter is not receiving a good 10Mhz Sine wave.

The UDC-IC has a three year warranty and a 24 hour turnaround on warranty repairs.

# SPECIFICATIONS

## Application

Interconnection of two 10 Mhz systems for sine wave to square wave clock distribution

## Capacity

One Input, Four Outputs

## Rear Panel Data Interface

One: 10Mhz Sine Wave Input  
Four: 10Mhz Square Wave Outputs

## Data Format

Data Transparent at all Data Rates

## Data Rates

10Mhz

## Front Panel Indicators

POWER and each data channel has DCD and CLK

## Surge Protection

Main power supply

## Power Source

AC Mains: 100-120 to 200-220VAC @10%, 50/60Hz, 0.16/0.08A, external 110/220 volt select switch, IEC Power Inlet, (2) 5mm Fuses  
DC Mains: DC Voltage, Input Range of -36 to -72vdc  
Current Draw at 48vdc: 75ma @ 3.6watts

## Environmental

Operating Temperature.....32° to 122° F (0° to 50° C)  
Relative Humidity.....5 to 95% Non-Condensing  
Altitude.....0 to 10,000 feet

## Dimensions

Height ..... 1.75 inches (4.44 cm)  
Width ..... 9.00 inches (20.86 cm)  
Length ..... 9.00 inches (20.86 cm)  
(1U Rack mount Optional Chassis Avail.)

## Weight

3 pounds (1.36Kg)

## Warranty

Three Years, Return To Factory

## Regulatory Approvals

UL 60950-1:2003, CAN/CSA-C22.2 No. 60950-1:2003, FCC Part 15, EN55022:2006, ICES-003, Class A

## ORDERING INFORMATION

Main Unit Part Number: 190000  
Model: UDC-IC  
Description: UDC-IC Interface Converter, 110/220VAC

Part Number: 129105  
Model: TTL-4 I/M  
Description: 4-PORT TTL 50-ohm Driver Interface Module

Part Number: 129109  
Model: 10Mhz I/M  
Description: 10Mhz Receiver/Buffer Interface Module

PART NUMBER	SERIAL CARD DESCRIPTION
129109	10Mhz Receiver/Buffer I/M, 50 Ohm
129105	4-Port TTL Driver I/M, 50 Ohm
	<b>OPTIONAL CARDS FOR OUTPUT</b>
129010	V.35 DCE I/M
129011	RS-530 DCE I/M
129012	RS-422 DCE I/M
129013	X.21 DCE I/M

## Optional 1U Rack Mount Chassis

Part Number: 204000  
Model: UDC-IC Rackmount  
Description: Rackmount UDC-IC Main Unit, 110/220VAC

## INCLUDED WITH EACH UNIT:

- 1) Operations Manual
- 2) Grounded Power Cord

## OPTIONAL ACCESSORIES

- 1) Spare Data Center Fuses
  - A) 160ma Fuse, Qty (2) Part # 714000
  - B) 80ma Fuse, Qty (2) Part # 714001

For further detailed technical information on this product, contact East Coast Datacom, Inc at: [support@ecdata.com](mailto:support@ecdata.com)

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