

UDX-R01, UDX-R02 and UDX-R03 Clock Recovery Heads



Features and Benefit

- Electrical Clock Recovery Heads
- 622 Mbps, 2.488 Gbps or 10 Mbps to 2.7 Gbps Continuous Rate Clock Recovery Trigger
- Low Jitter
- Optional N or SMA input connector
- Optional BNC or SMA output connector
- 1-m extended cable to reduce the input cable losses

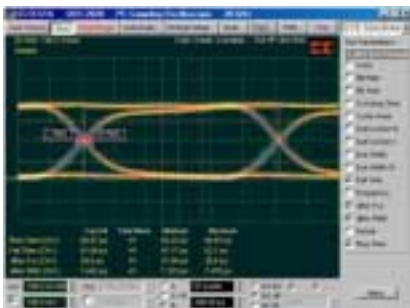
Applications

- Ability to trigger all UDS-2000 Series sampling oscilloscopes
- Light-wave communications
- Conformance testing of electrical signaling up to gigabit logic
- Pseudo-random bit-stream eye patterns
- High-speed serial data links for computer and communications applications
- Testing of frequency agile or multi-rate devices

Product Description

The UDX-R01, UDX-R02 and UDX-R03 Clock Recovery Heads are needed in cases where a trigger signal is not available. These modules are available to derive a timing reference directly from the waveform to be measured. The heads cover the most popular electrical lines used today.

The UDX-R01 covers 622 Mbps OC12/STM4 bit rate, while the UDX-R02 covers 2.488 Gbps OC48/STM16 bit rate. The UDX-R03 is a Continuous Rate Clock Recovery Head covering 10 Mbps to 2.7 Gbps bit rates.



A waveform of 2.488 Gbps eye diagram acquired with UDX-R02 Clock Recovery Head

Specifications and Characteristics

Compatibility - Compatible with all UDS-2000 Series sampling oscilloscopes.

Clock Recovery Range (NRZ coding) –

- UDX-R01: 622.08 Mbps, $\pm 0.1\%$,
- UDX-R02: 2488.32 Mbps, $\pm 0.1\%$,
- UDX-R03: 10 Mbps to 2.7 Gbps

Continuous Rate.

Sensitivity –

- UDX-R01: 50 mV p-p,
- UDX-R02: 100 mV p-p.
- UDX-R03: 50 mV p-p.

Jitter, RMS, max –

- UDX-R01: 16 ps,
- UDX-R02: 6 ps,
- UDX-R03: 3 ps + 5 mUI.

Input Coupling – AC.

Input Connector - Optional N-type or SMA (m).

Output Connector - Optional BNC (m) or SMA (m).

Ordering Information

P/N 790009 –

UDX-R01 622 Mbps Clock Recovery Head.

Option NB: N-type (m) input connector / BNC (m) output connector.

Option NS: N-type (m) input connector / SMA (m) output connector.

Option SB: SMA (m) input connector / BNC (m) output connector.

Option SS: SMA (m) input connector / SMA (m) output connector.

P/N 790010 –

UDX-R02 2.488 Gbps Clock Recovery Head.

Option NB: N-type (m) input connector / BNC (m) output connector.

Option NS: N-type (m) input connector / SMA (m) output connector.

Option SB: SMA (m) input connector / BNC (m) output connector.

Option SS: SMA (m) input connector / SMA (m) output connector.

P/N 790028 –

UDX-R03 10 Mbps to 2.7 Gbps Continuous Rate Clock Recovery Head.

Option NB: N-type (m) input connector / BNC (m) output connector.

Option NS: N-type (m) input connector / SMA (m) output connector.

Option SB: SMA (m) input connector / BNC (m) output connector.

Option SS: SMA (m) input connector / SMA (m) output connector.