

## UDX-P01 and UDX-P02 Prescale Trigger Head



### Features and Benefit

- Trigger-prescaled Heads
- 500 MHz to 12 GHz (UDX-P01) and to 18 GHz (UDX-P02) Trigger Bandwidth
- High sensitivity of 200 mV p-p up to 12 GHz (UDX-P02)
- Less than 2.5 ps max, 2.0 ps typ. RMS Jitter
- No Trigger Level control to synchronize the internal oscillator with an input signal
- Optional N- or SMA- input connector
- Optional BNC or SMA output connector
- 1-m extended cable to reduce the input cable losses

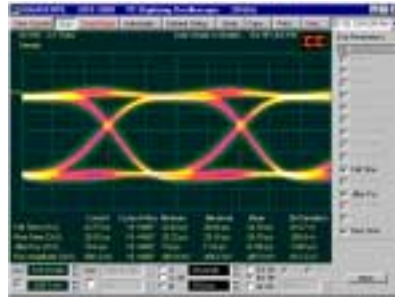
### Applications

- Ability to trigger all UDS-2000 Series sampling oscilloscopes
- For applications requiring more than 1 GHz trigger bandwidth
- Optical communication test
- High-speed component test
- Pseudo-random bit-stream eye patterns
- Microwave signal measurements

### Product Description

The UDX-P01/P02 Prescale Trigger Heads extend direct triggering on signals up to 12 GHz (UDX-P01) and 18 GHz (UDX-P02). In this mode, there is no control over the trigger level or slope.

The Heads include low-jitter high-speed frequency divider with a factor of 16. This divided signal is applied to the existing trigger circuitry. The trigger input is AC-coupled to the divider IC. The input threshold of the IC is set for maximum sensitivity and bandwidth, and it will operate correctly on a sine wave input from 500 MHz to 12 GHz (UDX-P01) or to 18 GHz (UDX-P02). Square wave triggers, or other sharp-edged transitions will function down to DC, but this is not specified because it depends on the characteristics of the signal edges. Optional N-type or SMA-type of input connectors is available.



A 12-Gbit eye-diagram acquired with the UDX-P01 Prescale Trigger Head. Low-level 9.7 ps P-p Jitter is provided

### Specifications and Characteristics

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

**Division factor** – 16.

**Bandwidth and Sensitivity:**

**UDX-P01** - 200 mV p-p from 500 MHz to 7 GHz, 400 mV p-p from 7 GHz to 10 GHz, 600 mV p-p from 10 GHz to 12 GHz (typical).

**UDX-P02** - 200 mV p-p from 500 MHz to 12 GHz, 400 mV p-p from 12 GHz to 16 GHz, 600 mV p-p from 16 GHz to 18 GHz (typical).

**Maximum RMS Jitter** - 2.5 ps (maximum), 2.0 ps (typical).

Including UDS-2000 mainframe jitter and with minimum delay setting.

**Maximum Safe Trigger Input Voltage** -  $\pm 2$  V (dc + peak ac) or 16 dBm.

**Input Coupling** – AC.

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

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

### Ordering Information

**P/N 790022** -

UDX-P01 12 GHz Prescaler Trigger 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 790027** -

UDX-P02 18 GHz Prescaler Trigger 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.