



Configuration guide

Three Moku Time & Frequency Analyzer setups

Frequency counter

Clock and timing analysis

1. Set the trigger threshold of Event A to where the signal is steepest on your waveform.
2. Set the event to detect rising edges.
3. Set Interval A to measure from Event A to Event A.

Event A

Source

DC: 1 MΩ : 4 Vpp

Threshold

Edge

Interval A

Start

Stop

Output 1

Signal

Zero point

Scaling

Invert

Range

Time-to-voltage converter

Pulse-width modulation decoding

1. In the TFA Events tab, configure the desired event detection parameters.
2. In the TFA Output tab, set the desired interval scaling (MV/s, KV/s, V/s) or count scaling (V/cnt, mV/cnt, nV/cnt). Then, turn on the output.
3. Pair this with the PID Controller in Multi-instrument Mode for a closed-loop feedback system.

Photon counter

Hanbury-Brown-Twiss (HBT) experiments

1. Set the acquisition mode to continuous.
2. Set the trigger threshold of Event A and Event B to match your photodetector's pulses.
3. Set the event to detect pulses on a rising edge.
4. Set Interval A to measure from Event A to Event B.

Event A

Source

DC: 1 MΩ : 400 mVpp

Threshold

Edge

Event B

Source

DC: 1 MΩ : 400 mVpp

Threshold

Edge

Interval A

Start

Stop