

# Time Synchronization Solution



Precision timing is increasingly important for high performance, low latency networks and applications requiring nanosecond timing accuracy.

The APS Networks® Synchronization Timing Solution has been designed to deliver the highest level of timing accuracy and provide precise time distribution over an Ethernet or IP network using our range of programmable switch products.

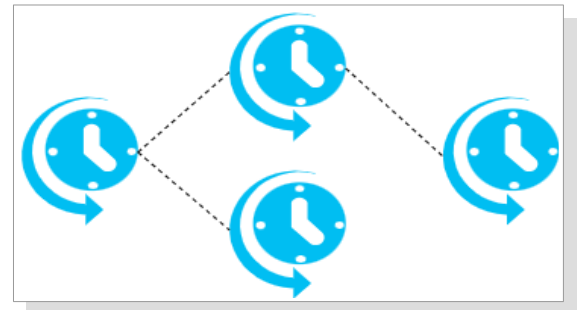
The 1-Step hardware solution provides profiles for standard PTP IEEE1588, Telecoms, Broadcast, OCP Datacenter and O-RAN requirements.

The combination of the Time Synchronization Solution with our programmable switch products enables Boundary and Transparent clock solutions where precision time is required which can be enhanced using the SyncE functionality if available on the network.

The Precision Time Solution from APS Networks® and design partner Oregano Systems (a Meinberg Company), can deliver nanosecond accuracy with IEEE PTP profile support for our Ethernet Network switch products.

## Benefits

- 1-Step Hardware PTP Solution
- Pre-defined PTP profiles
- SyncE enabled
- High Quality Oscillator
- PTP Management and Support



## Use Cases

Precision Time Solution for:

- 5G Mobile Networks
- Data Centers
- Media and Broadcast

## Main Features

- 1-Step Hardware PTP Solution
- Ordinary, Boundary & Transparent Clock capable
- Easy Configuration & Monitoring
- PTP profiles provided
- SyncE capable

## Why APS Networks?

Security by Design	Made in Europe	PTP Timing
Programmable	Modular	Innovative





Model	APS-PTP
Architecture	1-step Hardware Solution
Ordinary Clock	High Quality Local Oscillator
Boundary Clock	All PTP on per port basis
	Multicast
	Unicast
	Mixed Mode
Transparent Clock	P4 Pipeline Program Dependent
SyncE Enabled	Port Configurable
Connectivity	1PPS Input
	1PPS Output
	Time of Day (ToD)

Profile Support	
PTP Default Profile	IEEE 1588
Telecoms Profile	Rec ITU-T G.8275.1.1
	Rec ITU-T G.8275.2
Broadcast	SMPTE ST-2059-2
	AES-67
OCP Datacenter Profile	Yes
O-RAN	Yes
P2P Profiles	On request

General Support	
Hardware Warranty	3 year return to manufacturer
Software Support	12 months+ subscription
P4 Reference Examples	On request

Software	
Oregano Systems	Sync1588 PTP Profile Software
Meinberg SyncMon	Yes
Configuration Manager	Yes

Accuracy	
Versatile High Resolution PTP Time Stamping	4ns
Synchronization Accuracy Exceeds Class C	Rec ITU-T G.8273.2
Maximum Absolute Time Error < 5ns	Rec ITU-T G.8273.2 (Class D)
Further Accuracy Support	SyncE Enabled

Contact one of our Design Experts to help you choose your switch options

