



PRECISION TIME PROTOCOL (PTP)

Future *Zio* software versions may provide PTP support. PTP is used to synchronize the clock of a network client with a server (similar to NTP). However, PTP is mainly used in LANs, with much higher precision than NTP (usually tens of microseconds to tens of nanoseconds). It is specified in IEEE 1588.

Typically, PTP uses **User Datagram Protocol (UDP)** as its transport protocol (although other transport protocols are possible). The well-known UDP ports for PTP traffic are 319 (Event Message) and 320 (General Message).

2.3.6 TCP and UDP Ports Used by *Zio*

Ensure that your network equipment is configured to allow network traffic using the TCP/UDP ports listed in [Table 2-1](#).

Table 2-1 TCP and UDP Ports Used by *Zio*

Internet Protocol	Function	Port Type	Port Number
FTP	FTP Data Transfer (firmware upgrades)	TCP	20
FTP	FTP Session Control (firmware upgrades)	TCP	21
HTTP	<i>Zio</i> Coordinator Web Server	TCP	80
NTP	Network Time Protocol	TCP	123
PTP	Precision Time Protocol	UDP	319, 320
syslog	Event Logging	UDP TCP	514 6514
RTSP	<i>Zio</i> A/V Stream Control	TCP/UDP	554
--	<i>Zio</i> Device Discovery (Multicast)	TCP/UDP	2702, 2703, 2705, 2706
--	<i>Zio</i> Device Discovery (Unicast)	TCP/UDP	2706, 2013
RTCP	RTCP Control Port	TCP	5005
RTSP	Streaming Port on <i>Zio</i> S2000 Series Encoder	TCP/UDP	5540
Telnet	<i>Zio</i> Command Line Interface (CLI)	TCP	8000 (Note)
WebSocket (WS)	<i>Zio</i> Coordinator Device Control	TCP	8001
WS	<i>Zio</i> Coordinator Control via GUI	TCP	8080
WS	Source Preview Broadcast from <i>Zio</i> S2000 Series Encoder	TCP	8103
RTSP	Video ports dynamically assigned in the RTSP exchange	TCP/UDP	various (vendor-specific)

Note: This port is configurable to any port above 1023.