



## PTP License

### WR-ZEN family, WR-LEN+ & DOWR

It is the package that unleashes the full potential of the WR to PTP interoperability.

WR-ZEN family, WR-LEN+ and DOWR easily distributes time and frequency to other equipment by implementing **standard timing protocols** such as PTP, NTP, IRIG-B, etc.

The PTP license allows you to unlock the PTP messages ratios for the announce, sync and delay request packets.

Also, it allows to unlock the different options to enable other profiles than the default such as telecom profiles ITU-T G.8265.1, G.8275.1 and power profile IEEE C37.238-2011.



# Software Specifications / PTP license

System On-Chip	
<b>Ports available</b>	ETH0 & ETH1
<b>Roles</b>	Master and slave, only master, only slave
<b>Interoperability</b>	A device can be a WR slave and PTP master or vice versa. It can also work as WR and PTP master at the same time.

Software	
<b>Daemon</b>	ptpd_gpa
<b>Profiles</b>	<ul style="list-style-type: none"> <li>▪ Default</li> <li>▪ ITU-T G.8265.1</li> <li>▪ ITU-T G.8275.1</li> <li>▪ IEEE C37.238-2011 (experimental)</li> </ul>
<b>Max slaves</b>	16 unicast clients

Configuration options		
Options	With license	Without license (default profile)
<b>Mode</b>	Master, slave or disabled	Master, slave or disabled
<b>Transfer mode</b>	Multicast or unicast	Multicast
<b>Unicast negotiation</b>	Enabled or disabled	Disabled
<b>Clock class</b>	0 – 255	0
<b>Announce ratio</b>	-4 – 4 (1 msg 16s – 16 msg/s)	1 msg/sec
<b>Sync ratio</b>	-7 – 7 (1 msg 128s – 128 msg/s)	1 msg/sec
<b>Delay Req. ratio</b>	-7 – 7 (1 msg 128s – 128/s)	1 msg/sec
<b>Delay Mechanism</b>	End to End (E2E) or Peer to Peer (P2P)	End to end (E2E)
<b>Network mode</b>	IPv4 or Ethernet (layer 2)	IPv4
<b>Domain</b>	0 – 255	0
<b>Priority 1</b>	0 – 255	0
<b>Priority 2</b>	<i>Any number</i>	0
<b>Offset correction (ns)</b>	<i>Any number</i>	0
<b>BMCA</b>	Enabled or disabled	Disabled
<b>Servo K<sub>p</sub></b>	<i>Any number</i>	1
<b>Servo K<sub>i</sub></b>	<i>Any number</i>	1