



GlobalTop Tech Inc.
宇誠科技股份有限公司

Document	Global Top 1PPS Delay Compensation				
Author	Hector Su	Date	2011/12/08	Ver.	1.0



Global Top 1PPS Delay Compensation

V 1.0

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1. 1PPS Introduction

What is the **1PPS (One Pulse per Second)**: 1PPS signal is provided through designed output pin for many external applications. The pulse is not only limited to being active every second but also allowed to set up the required duration by programming user-defined settings.

Why is **1PPS Delay Compensation** used: Generally speaking, the wire length of antenna of GPS module may cause 1PPS output signal be delayed. So we provide customized command of firmware to compensate 1PPS timing pulse. So we can have precise time (synchronization) at every location in that way.

2. 1PPS Delay Compensation PGTOP Command List

2.1 PGCMD_SET_PPS_DELAY

Packet Type: 105 PGCMD_SET_PPS_DELAY

Support Chip Type:

MT3339

Packet Meaning:

Setting 1PPS delay compensation

Data Field:

PGCMD,105,ppsdelaytime

ppsdelaytime: 0 means no pps delay, range:0~2000 ns

Example:

Input: \$PGCMD,105,10*68<CR><LF>

Return: \$PGACK,205,1,10*36<CR><LF>

Note:

The ppsdelaytime set by user will get back to default value when power on or power reset.

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2.2 PGACK_PPS_DELAY

Packet Type: 205 PGACK_PPS_DELAY

Support Chip Type:

MT3339

Packet Meaning:

1PPS delay compensation setting acknowledge

Data Field:

PGACK,205,status,ppsdelaytime

status:

1 → Success

2 → Fail

ppsdelaytime: The value of delay time by user's setting. It may be null.

Example:

\$PGACK,205,1,10*36<CR><LF>

\$PGACK,205,2*5B<CR><LF>

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