$OP Setting

Purpose:

The document provides information on the $OP setting, which is not documented in the current version of the manual. The $OP setting defines the number of pulses per measurement. The $OP setting can improve measurement accuracy by averaging more data before reporting the measurement. The default setting is 8.

The general rule-of-thumb is if your application isn't reliant on time to report the distance measurement and you care more about accuracy of the measurement, choose a higher $OP value; if you care more about reporting time and less about measurement accuracy, choose a lower $OP value.

Number of Pulses Per Measurement

This command applies to the Standard and Extended Range Measurement Modes.

Set: $OP,iteration<CR><LF>   Instrument Reply: $OP,iteration*CRC16<CR><LF>

Get: $OP<CR><LF>   Instrument Reply: $OP,iteration*CRC16<CR><LF>

where: $ = message identifier
                OP   = mnemonic for Output Precision
                iteration   = Each iteration = 28-pulse block.
                                 Valid Range: 8 to 256, as described in the table below.
                                 When iteration = 8, output rate is approximately 15 Hz.
                                 =256, output rate = approximately .5 Hz
                *CRC16   = 16-bit CRC
                <CR>   = carriage return
                <LF>   = line feed

Example: $OP,16<CR><LF>   Sets Output Precision to 16 iterations.

Valid OP Commands	Approximate Output Rate
8	15.0 Hz
16	7.5 Hz
32	3.8 Hz
64	1.9 Hz
128	.1 Hz
256	.5 Hz

Note: The output calculations are only an approximation and must be tested for the application.