

# COM r3.1 Update for d1.4

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# New Key Words

KeywordC	default	Uiits	Status	
T_O	0	mUI	Use for C2M	If 0, find VEC an EH at T_s
samples_for_C2M	100	samples/UI	Use for C2M	timing resampled step
Min_VEO_Test	0		experimental	
AC_CM_RMS	0	Volts	experimental	
ACCM_MAX_Freq	fb	Hz	experimental	

# Change determining VEC and EH

- ❑ Requirements
  - PMD\_type is C2M
  - T\_O is not 0
- ❑ T\_O the +/- window around the sample point ( $t_s$ ) where EH and VEC are estimated
  - IEEE Draft P802.3ck/D1.4 120G p 246
- ❑ T\_O should be set to 50 mUI as per D1.4
- ❑ samples\_for\_C2M is set to 100 samples/UI to increase timing resolution from M (32) samples/UI
- ❑ Min\_VEO\_Test set to a non-zero value breaks the optimization loop for values EH less than Min\_VEO\_Test volts.
  - If 0, the EH is not considered for in the optimization loop.
  - Since we really don't know what EH and VEC spec needs to be, set to 0 for now

# Experimental for CM investigation

- ❑ **AC\_CM\_RMS** is the CM BBN AWGN RMS at COM source point
  - Default is zero
  - Adds common mode noise source to the COM signal path for the through channel
  
- ❑ **ACCM\_MAX\_Freq**
  - Max frequency to integrate noise over a the Rx
  - Defaults is  $f_b$