

**BELLA Laser parameter list for CVT (Current Value Table) for LOASIS Control System**

Updated: 6/17/2011

#	Parameter - Location	Source of data /THALES name/	Unit	Type of data (0-D, 1-D, or 2-D)	Estimated size/shot (kB)	Need base (shot-by- shot or occasionally)	network need	Notes	Tony's additional notes
<b>GROUP A: THALES provides based on Contract (Ref: DDR-2010 feb)</b>									
Spectrum_Regen	Oscillator spectrum	SP1	counts	1-D		per minute			Wim suggested 1D data would not be made available. instead we would get things like central wavelength/FWHM/ peak counts
Spectrum_XPW	Booster spectrum	SP2	counts	1-D		per minute			as above
Spectrum_Booster	AMP1 spectrum	SP3	counts	1-D		per minute			as above
Spectrum_Preamp	AMP2 spectrum	SP4	counts	1-D		per minute			as above
Spectrum_Amp3	AMP3 spectrum	SP5	counts	1-D		per minute			as above
Spectrum_State_Booster	AMP1 spectral checkpoint	SP-P1	mV	0-D		for each shot		bandwidth limit check?	I dont know what a checkpoint means
Spectrum_State_Preamp	AMP2 spectral checkpoint	SP-P2	mV	0-D		for each shot		bandwidth limit check?	as above
	Oscillator pulse train - photodiode trace	P1	mV	1-D		per minute			no 1d as above?
	Regen pulse train - photodiode trace	P2	mV	1-D		per minute			no 1d as above?
	XPW beam pointing	BEAM1	counts	2-D		per minute			no 2d either unless we are changing our minds. save by clicking button was the agreement. maybe we could ask for an autosave to disk for 1 and 2d data. they could allow us to have a config file with save location and frequency
	Booster beam pointing	BEAM2	counts	2-D		per minute			2d comment as above
	Preamp beam pointing	BEAM3	counts	2-D		per minute			2d comment as above
BP_Power_1	Regen energy	POW1	mJ	0-D		for each shot		THALES monitors it at 1 kHz	No network will be able to perform at 1kHz. The update speed should be every few seconds and include the rms variation
BP_Power_3	Booster energy	POW2	mJ	0-D		for each shot		THALES monitors it at 10 Hz	every shot?
DIAG_CU_Power_Preamp_1 (Hardware to be upgraded)	Preamp energy	POW3	mJ	0-D		for each shot		THALES monitors it at 10 Hz	every shot?
DIAG_CU_Power_Amp1_1	AMP1 energy	POW4	J	0-D		for each shot		THALES monitors it at 10 Hz	every shot?
DIAG_CU_Power_Amp2_1	AMP2 energy	POW5	J	0-D		for each shot		THALES monitors it at 1 Hz	
DIAG_CU_Power_Amp3_1	AMP3 energy	POW6	J	0-D		for each shot		THALES monitors it at 1 Hz	

GAIA_HP_energy_Measure_A_ (#1-12)	GAIA IR line A energy (#1-12)	POW-G(1-12)-A	J	0-D		for each shot		THALES monitors it at 1 Hz	
GAIA_HP_energy_Measure_B_ (#1-12)	GAIA IR line B energy (#1-12)	POW-G(1-12)-B	J	0-D		for each shot		THALES monitors it at 1 Hz	
NA	GAIA geen output energy (#1-12)	POW-G(1-12)	J	0-D		for each shot		THALES monitors it at 1 Hz	
CCD_3D_Regen	Regen beam profile	CCD1	counts	2-D		per minute			autosave feature as above instead of network availability?
CCD_3D_Booster	Booster beam profile	CCD2	counts	2-D		per minute			as above?
CCD_3D_Preamp	Preamp beam profile	CCD3	counts	2-D		per minute			as above?
CCD_3D_Amp1	AMP1 beam profile	CCD4	counts	2-D		per minute			as above?
CCD_3D_Amp2	AMP2 beam profile	CCD5	counts	2-D		per minute			as above?
CCD_3D_Amp3	AMP3 beam profile	CCD6	counts	2-D		for each shot			Is this cam controlled by us or them?
<b>GROUP B: Others to be considered</b>									
	SAGA output energy (#1-3)	photodiode	J	0-D		per minute		THALES did not plan to record	
	Post compressor mode imager	CCD	counts	2-D		for each shot			our responsibility?
	Post compressor wavefront	CCD	counts	2-D		for each shot			our responsibility?
	Post compressor spectrum	spectrometer	counts	1-D		for each shot			our responsibility?
	SSA -trace	diode array	counts	1-D		per minute			our responsibility?
	SSA -FWHM	software	fs	0-D		for each shot			our responsibility?
	Spider (for asymmetry)	trace by software		1-D		per minute			our responsibility?
	Sequoia	photodiode/PhotoMF		1-D		daily			our responsibility?