



Extrapolated (*)		9.70E+00	3.64E+00	4.85E+00	2.42E+00	2.42E+00	2.42E+00	2.42E+00	2.42E+00	2.42E+00	2.42E+00	2.42E+00	2.42E+00	4.85E+00	2.42E+00	STAGE GAIN		
HV	1230	9.70E+00	3.53E+01	1.71E+02	4.14E+02	1.00E+03	2.43E+03	5.90E+03	1.43E+04	3.47E+04	8.41E+04	2.04E+05	9.88E+05	2.39E+06		CUMULATIVE GAIN		
GAIN	2.39E+06	265.9459459	99.72973	132.973	66.48649	66.486486	66.48648649	66.48649	66.48649	66.48649	66.48649	66.48649	132.973	66.48649		VOLTAGE Drop between terminals		
Stage Gain propor to V	0	265.9459459	365.6757	498.6486	565.1351	631.62162	698.1081081	764.5946	831.0811	897.5676	964.0541	1030.541	1163.514	1230		VOLTAGE in terminal		

System GAIN & SPE response		
BW	3.00E+06	
Ar_FEE_meas	668.3439176	
A_ATCA_conf	1	
A_r_T(V/I)	668.3439176	
LSB	0.48828125	mV
FEE_tau	5.31E-08	
SPE_i_meas	28	LSB
	13.671875	mV
SPE_PMT_out	20.45634686	uA
	0.511408672	pC
	3.20E+06	e

0.1% dV → Closely Related to Linearity

Nphot_max	100000	photons
Nphot_max	51140.86715	pC

Use Stage Gain to get Charge required in every stage

C(Vmax)			
2-1.5u	3-1.5u	2-4.7u	
750	500	2350	nF
4351.72	21097.43	51140.87	pC
0.066486	0.132973	0.066486	dV NEEDED
0.005802	0.042195	0.021762	dV REAL