

COST COMPARISON PMQs / EMQs for the CCDTL Linac4 – MV 25.8.2009

(compiling information from A. Lombardi, T. Zickler, D. Nisbet, J.C. Guillaume)

Scenario 1 (baseline): 21 EMQs + 13 power converters

Scenario 2 (alternative): 14 PMQs + 7 EMQs + 7 power converters

Item	number	Unit cost (CHF)	Total cost (CHF)	Comments
PMQ	14+2 spares	5'400	86'400	+20% from estimate 04/2008
PMQ holder	14	100	1'400	small holder (as in chopper line)

Cost PMQ option: 87'800 CHF, ~100'000 CHF

Item	number	Unit cost (CHF)	Total cost (CHF)	Comments
EMQ	14+1 spare	7'700	~105'000	with some add. cost for small series
Power conv.	6	18'000	108'000	6/43
Cabling	14		40'000	150m/quadrupole = 2'100m

Cost EMQ option: 253'000 CHF, ~250'000 CHF