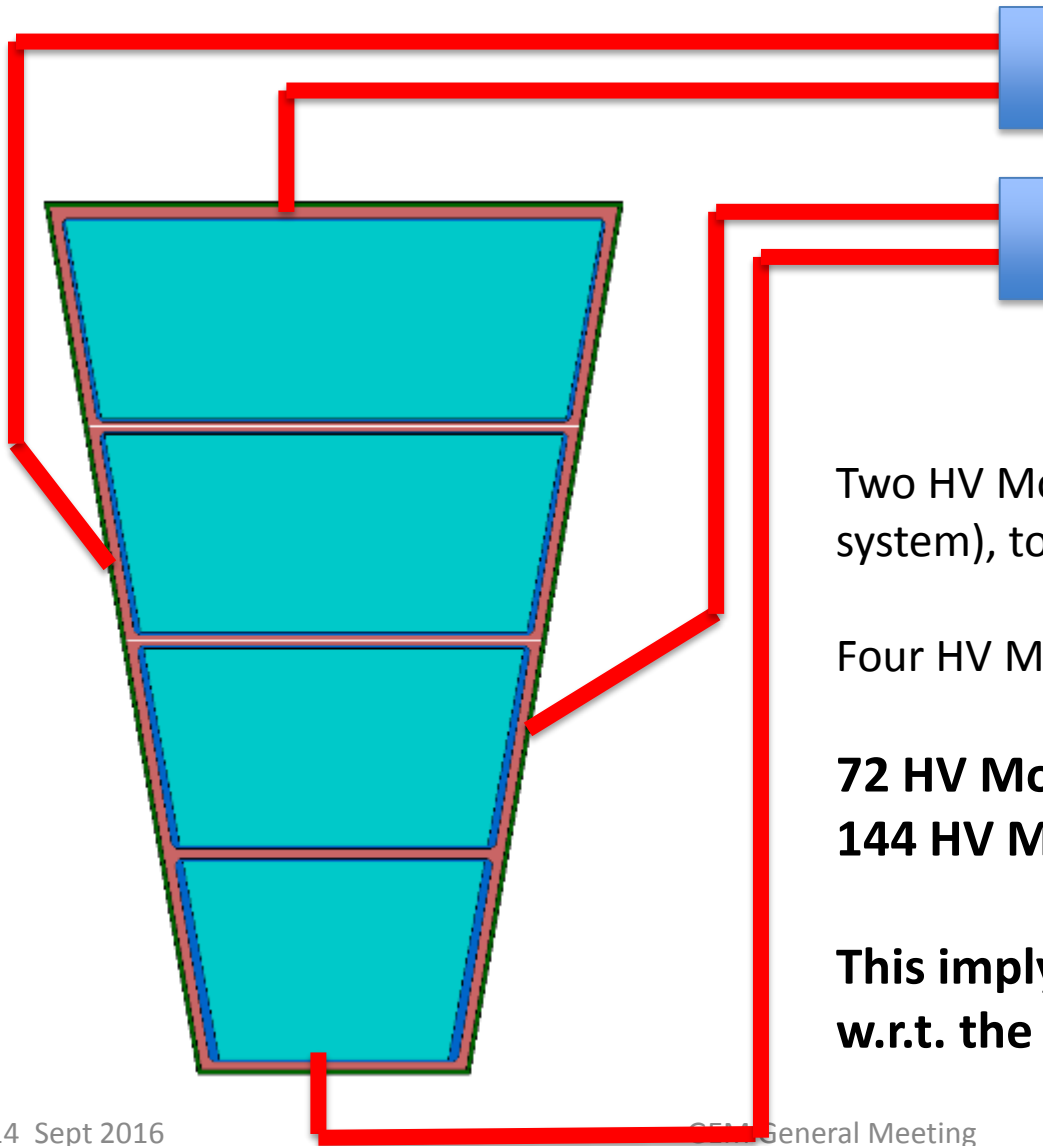


# HV schema for GE2/1 : Option A

28 ch. per chamber (56 ch. Per super-chamber)



Two HV Module, GE1/1 model, (multichannel system), to power one GE2/1 chamber.

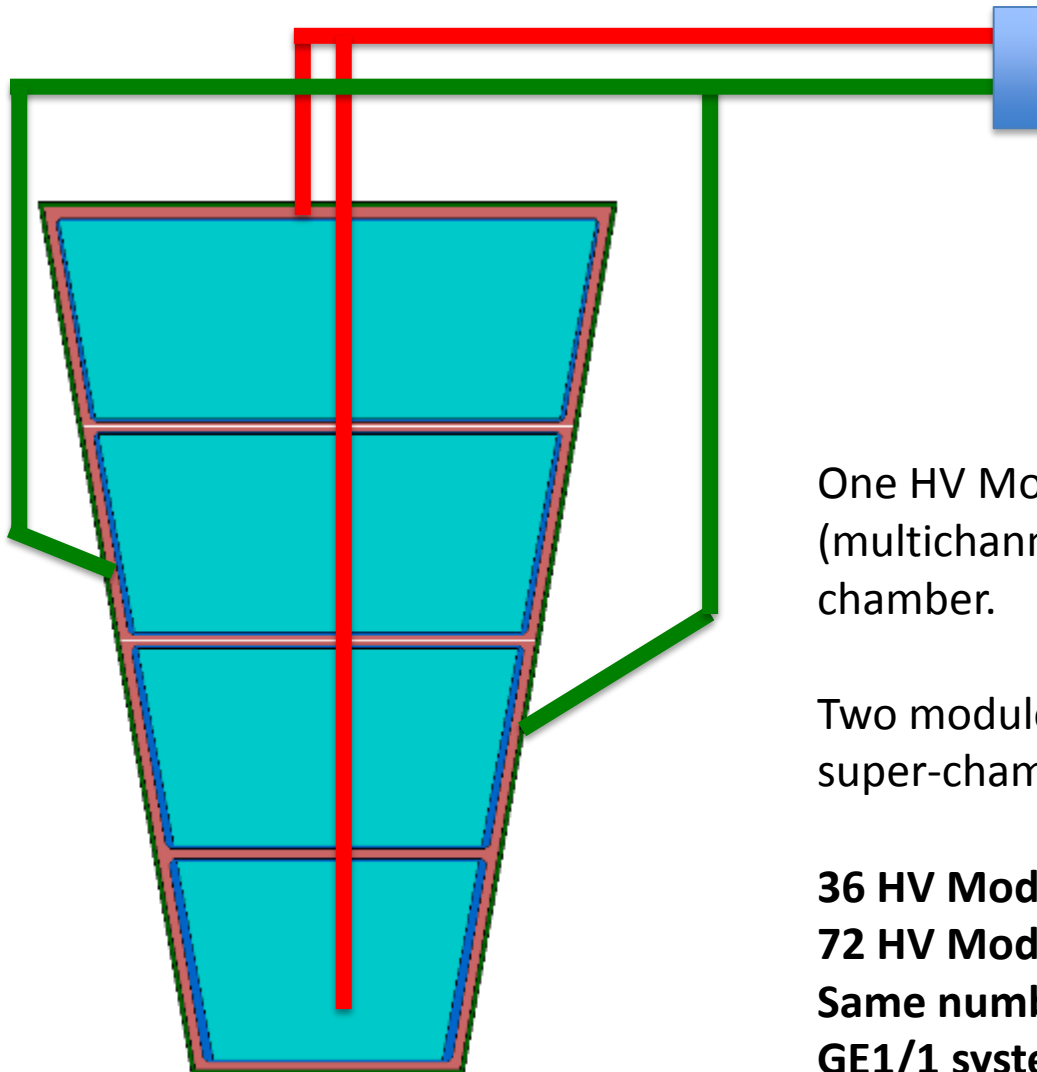
Four HV Module for a super chamber

**72 HV Modules (x 7 channel) per EndCap  
144 HV Modules in total**

**This imply double number of HV board  
w.r.t. the GE1/1 power system**

# HV schema for GE2/1 : Option A

14 ch. per chamber (24 ch. Per super-chamber)



One HV Module, GE1/1 model  
(multichannel system), to power one GE2/1  
chamber.

Two modules will be necessary to power a  
super-chamber which will cover 20 Deg.

**36 HV Modules (x 7 channel) per EndCap**  
**72 HV Modules in total**  
**Same number of HV board used in the**  
**GE1/1 system**

- A single HV sector in short will absorb  $\sim 45$  microA ( $450 \text{ V} / 10 \text{ M ohm}$  – protection resistance), the max number of HV sector which we can supply will be  $I_0 \text{max} / 45$
- In GE1/1 we have 47/40 HV sectors in Long/Short foil
- In M4 of GE2/1 will have 50 HV ( $\sim 42 \text{ M3}$ ,  $\sim 34 \text{ M2}$ ,  $\sim 26 \text{ M1}$ )
- Powering M4+M1 and M2+M3 each HV channel will provide power up to 76 HV sectors, the relative fraction of acceptable “dead sectors” will be about  $\frac{1}{2}$  w.r.t. the GE1/1 fraction
- To reduce the current absorbed by the single sector may we can change the value of the protection resistance, to be investigated with Rui.