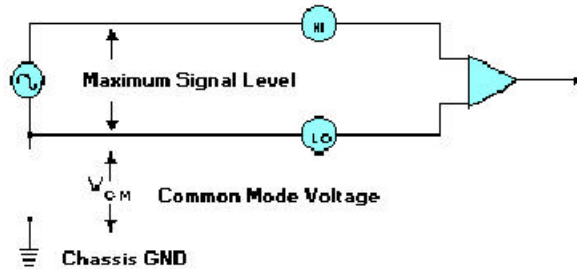


How are maximum input voltage and maximum common mode voltage related on the Integra series (e.g.77xx) modules?

Each analog channel on a 77xx switch module has a HI and a LO terminal for connection of the signal of interest. This connection has a maximum signal level specification. Additionally, the 77xx module has a Common Mode Voltage specification. Common mode voltage is the potential difference between the 27xx mainframe's chassis ground and the HI or LO terminals. In effect, it is the amount by which the signal can be floated relative to chassis ground.



The input voltage and common mode voltage are listed as follows.

Switch Module	Maximum Common Mode Voltage(V_{CM})	Maximum Voltage between module HI and LO Assume MAXIMUM V_{CM}	Maximum Voltage between module HI and LO Assume $V_{CM} = 0V$
7700	300V	0V	300V
7701	300V	0V	150V
7702	300V	0V	300V
7703	300V	0V	300V
7705	300V	0V	300V
7706	300V	0V	300V
7707	300V	0V	300V
7708	300V	0V	300V
7709	300V	0V	300V
7710	300V	0V	60V
7711	0V	60V	60V
7712	0V	30V	30V

The maximum allowed input voltage at the HI and LO terminals is the difference between the maximum allowed common mode voltage (from specification) and the actual common mode voltage present in your system.

For example on the 7700 module where the common mode voltage specification is 300V and the maximum input voltage specification is 300V:

- Input Signal = 220V, then the Max common mode voltage allowed would be 80V.
- Input Signal = 50V, then the Max common mode voltage allowed would be 250V.