



## Note 5: Electromagnetic compatibility (EMC)

The following assumptions apply for EMC testing:

- Our quotations are based upon testing in one mode of operation **ONLY** and any further modes identified will incur additional charges, unless otherwise specified.
- Your equipment will be configured to operate continuously whilst under test i.e. 100% duty cycle.
- The cycle time of the EUT for emissions and susceptibility testing (including the time to report any susceptibilities) does not exceed 100mS.
- All required documentation will accompany the equipment when submitted.
- An engineer with a detailed knowledge of the equipment under test will be available to contact in person or by telephone throughout the test programme and will have access to all the relevant electrical and mechanical diagrams, parts list and details of any clock frequencies used.
- All internal interface cables are deemed to be less than 3 metres. Only one single port of each type will be tested (if applicable).
- All equipment ports will be occupied by representative cables and either suitably loaded or typically exercised throughout test.
- You will supply any support equipment necessary to drive or monitor the equipment under test together with signal/control cabling 10 metres long for interconnection. Power supply leads to be of typical length.
- Discussions should take place with our project engineer prior to commencement of test in order to agree the test set up and cabling and break out panel requirements.
- For battery operated equipments, please supply sufficient batteries for the duration of the test programme and if possible, a suitable charging device.
- **Surge Protection:** We assume that sufficient surge protection has been included within your product's power circuitry. The guidance laid down in the latest versions of IEC/EN 61000-4-5 stipulates a "time between successive pulses: 1 min or less". We will default to the minimum repetition rate of the test platform utilised but must highlight that any failure would require a retest at a repetition rate of one pulse per minute. This will incur additional charges.

**NOTE:** For testing to any of the ETSI EN 301 489 series of radio EMC standards, please give careful consideration to the performance criteria detailed in Section 6 of the relevant standard.

### Risk Analysis of Medical Products:

For all products tested to EN60601-1-2 it is a requirement that a risk analysis to ISO 14971 is carried out to identify all "Essential performance of the equipment and systems". It is a pre-requisite that the manufacturer carries this out **PRIOR** to commencement of testing and makes the test laboratory aware of all modes of operation that need testing and the respective failure criteria. Our quotations are based upon testing in one mode of operation **ONLY** and any further modes identified will incur additional charges.