The total allowable cable length used to connect up to 10 IS devices to each ISM module is 7,315 meters or 24,000 feet.

2. Each cable (or wiring) used to connect IS devices to the ISM must not exceed a capacitance of 328 pF/meter or 100 pF/foot.

3. The total cable capacitance, including all of the cable used to connect the intrinsically safe equipment to each ISM module, must not exceed 3000 pF.

4. Each cable must not exceed an inductance of 0.856 μH/meter or 0.2 μH/foot.

5. The line ratio of the cable must not exceed 200 μV/mV.

6. For each TIS-450 console installed, the maximum number of IS devices connected to the associated apparatus is 64. A maximum of 20 TIS of IS devices connected to a universal sensor module (USM) may be installed on each channel of the TIS apparatus.

7. Internally hazardous apparatus shall be used and must not be supplied from or contain an internal or external circuiting, a source of potential energy, or effect with earth in excess of 250V or 250VAC, with 250V is 250VAC.

8. Connect the fiber optic cable to the earth ground at the power distribution panel with a 1 sq mm (10 AWG) or larger conductor. Grounding must comply with NEC Section 250-114.

9. The electrical connection shall be made using a connector designed for this purpose. Each intrinsically safe device may use an optical fiber optic cable to connect to the associated apparatus in the event of a fault condition.

10. The system shall be designed to determine if the installation length is suitable for lightning or other surges. If necessary, the lightning protection system installed must be designed to minimize the risk of damage to the system.

11. The system is the responsibility of the installer to determine compliance of single apparatus. Single apparatus used with this system must conform to the following requirements:
   a. Constructed without any sources of stored energy such as batteries, capacitors, and inductors.
   b. Constructed without any sources of stored energy that produce more than 5 times over the nominal rating of the voltage.
   c. If constructed with any devices, the single apparatus shall be capable of maintaining the test voltage to earth for 4000VAC with 30 seconds at less than 10% of the test voltage.
   d. If the above conditions are met, the single apparatus shall be capable of maintaining the test voltage to earth for 6000VAC with 30 seconds at less than 10% of the test voltage.
   e. Field installation and operation of single apparatus must comply with NEC 60079-0 Sections 7 & 8 and NEC 60079-26 Class 1, A.

12. The available power within the system single apparatus that has electrical components that exceed 20 sq mm in total surface area may be increased up to 50% of the temperature of +25°C. Other types of single apparatus must be tested in accordance with NEC 60079-11 Section 10.2.

13. The motor must be a suitable power source in accordance with NEC 60079-26.

14. Special caution for safe use as defined in the Certificate of Conformity of the Intrinsically Safe System, Manual 677013-87, must be taken into account.

15. The combination of up to four modules may be installed in any single console module.

16. The modules provide wiring terminals for the connection of equipment in non-hazardous locations.

17. The system is the responsibility of the installer to determine compliance of single apparatus.

18. The system is the responsibility of the installer to determine compliance of single apparatus.