

### EPS - ELECTRICAL PROTECTION SYSTEM



The EPS protects fixtures used in indoor applications against a variety of electrical issues. This innovation, patented by L&L, guarantees electrical protection against polarity reversal, hot plugging and voltage spikes of up to 48VDC, which can occur if there are faults in the electrical circuit.

### IPS - INTELLIGENT PROTECTION SYSTEM



The IPS protects lighting fixtures from water infiltrations, which can occur if there are faulty junctions between the cables in outdoor or underwater applications. This innovation, patented by L&L, also guarantees electrical protection against polarity reversal, hot plugging, ESD and power surges, which can occur if there are faults in the electrical circuit.

### PID - PROTECTION IMPEDANCE DEVICE



The PID protects lighting fixtures from electrical phenomena external to the system, such as static electricity accumulation or electromagnetic interference coming from the mains power. Generally, these are events with a low energy content.

### SPD - SURGE PROTECTION DEVICE



The SPD protects lighting fixtures from electrical phenomena external to the system, such as power surges. In particular, this device is specifically for protection against serious events with a high energy content.

### NTC - BUILT-IN TEMPERATURE SENSOR



When the NTC icon is displayed, these fixtures have a thermistor mounted on the LED board to protect the luminaire against overheating. The sensor is constantly monitoring the luminaire and should it begin to exceed the maximum operating temperature at which it can operate correctly, the protection is activated and gradually reduces the power. The NTC causes the integrated electronic parts to cool down to avoid the lighting fixture from instantly switching itself off. When the operating temperature is again within normal range, the NTC automatically restores the lighting fixture's original operating conditions.