



The IP Code defined in international standard IEC 60529 classifies the level of protection that electrical appliances provide against the intrusion of solid objects or dust, accidental contact, and water. It consists of the letters IP (for "international protection rating"^[1], sometimes also interpreted as "ingress protection rating") followed by two digits and an optional letter.

The digits indicate conformity with the conditions summarized in the tables below. Where there is no protection rating with regard to one of the criteria, the digit is replaced with the letter X.

For example, an electrical socket rated IP22 is protected against insertion of fingers and will not be damaged or become unsafe during a specified test in which it is exposed to vertically or nearly vertically dripping water. IP22 or IP2X are typical minimum requirements for the design of electrical accessories for in-door use. The standard aims to provide users more detailed information than vague marketing terms such as "waterproof".

Remtron transmitters are **IP66/67** rated. Below is a break down of what IP66/67 is in relation to Remtron products.

First digit:

The first digit indicates the level of protection that the enclosure provides against access to hazardous parts (e.g., electrical conductors, moving parts) and the ingress of solid foreign objects.

Level	Object protected against	Effective against
6	dust tight	No ingress of dust; complete protection against contact

Second digit:

Protection of the equipment inside the enclosure against harmful ingress of water.

Level	Object protected against	Details
6	powerful water jets	Water projected in powerful jets against the enclosure from any direction shall have no harmful effects.
7	immersion up to 1 m	Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time (up to 1 m of submersion).

IP codes are similar to NEMA ratings. Equivalent NEMA ratings for Remtron products with IP ratings:

NEMA 4 Water Tight & Dust Tight - Indoors/Outdoors

Type 4 enclosures are intended for general purpose indoor or outdoor use primarily to provide a degree of protection against windblown dust and rain, splashing water, and hose directed water; and to be undamaged by the formation of ice on the enclosure.

NEMA 6 Submersible, Water Tight, Dust Tight, & Ice/Sleet Resistant - Indoors/Outdoors

Type 6 enclosures are intended for general purpose indoor or outdoor use primarily to provide a degree of protection against the entry of water during temporary submersion at a limited depth; and to be undamaged by the formation of ice on the enclosure.