

Ingress Protection (IP) Rating

'IP' ratings are used to define levels of sealing effectiveness of electrical enclosures against intrusion from foreign bodies, tools, dirt, moisture and water. When considering outdoor/indoor lighting, this international classification system essentially refers to how waterproof a set of lights or lighting accessory is. The first digit indicates the degree of protection against solid foreign objects, and the second digit indicates the degree of protection against water ingress. Please see the table below, which defines and explains the differences between each IP.

INDOOR	IP20	Protected from touch by fingers and objects greater than 12 mm. Not protected from liquids.	 
SEMI-OUTDOOR	IP43	Protected from tools and small wires greater than 1 mm. Protected from vertical water sprays less than 60°C.	  
	IP44	Protected from tools and small wires greater than 1 mm. Protected from water splash from any direction.	  
	IP45	Protected from tools and small wires greater than 1 mm. Protected from low pressure water jets from any direction.	  
OUTDOOR	IP55	Protected from limited dust ingress. Protected from low pressure water jets from any direction.	 
	IP64	Protected from total dust ingress. Protected from water splash from any direction.	 
	IP65	Protected from total dust ingress. Protected from low pressure water jets from any direction.	 
	IP66	Protected from total dust ingress. Protected from high pressure water jets from any direction.	 
	IP67	Protected from total dust ingress. Protected from immersion up to 1 meter for 30 minutes.	 
UNDER WATER	IP68	Protected from total dust ingress. Protected from long term immersion up to a specified pressure.	 