

### Ingress Protection Ratings

The NT7000 smart clock is a durable timeclock with an **IP63 rating** for its front panel. IP Codes, or Ingress Protection Markings, are published by the International Electrotechnical Commission and are objective, measurable indicators of the durability of devices. The codes are comprised of two digits. The first indicates the level of protection against solid particles, while the second indicates the level of protection against water.

The following charts\* summarize the levels of protection indicated by each digit of an IP rating.



### Protection against solid particles

Level	Object size protected against	Examples
0	—	Not protected against objects
1	>50 mm (1.97 in)	Large surfaces
2	>12.5 mm (0.49 in)	Fingers or similar
3	>2.5 mm (0.10 in)	Tools, thick wires, and similar
4	>1 mm (0.04 in)	Most wires, screws, and similar
5	Dust protected	Protected against most dust
6	Dust tight	Completely protected against dust

\* IP Code. (2015, November 27). In Wikipedia, The Free Encyclopedia. Retrieved 19:44, December 11, 2015, from [https://en.wikipedia.org/w/index.php?title=IP\\_Code&oldid=692698760](https://en.wikipedia.org/w/index.php?title=IP_Code&oldid=692698760)

## Protection against water

Level	Protected against	Examples
0	Not protected	—
1	Drops of water	1 mm (0.04 in) rainfall per minute Duration: 10 minutes
2	Dripping water when tilted up to 15°	3 mm (0.12 in) rainfall per minute Duration: 10 minutes
3	Spray of water	0.7 liters (1.48 pints) per minute Pressure: 50–150 kPa Duration: 5 minutes
4	Splashes of water	10 liters (2.64 gallons) per minute Pressure: 50–150 kPa Duration: 5 minutes
5	Jets of water	12.5 liters (3.30 gallons) per minute Pressure: 30 kPa Distance: 3 m (9.84 feet) Duration: At least 3 minutes
6	Powerful jets of water	100 liters (26.42 gallons) per minute Pressure: 100 kPa Distance: 3 m (9.84 feet) Duration: At least 3 minutes
6k	Powerful jets of water (increased pressure)	75 liters (19.81 gallons) per minute Pressure: 1000 kPa Distance: 3 m (9.84 feet) Duration: At least 3 minutes
7	Immersion up to 1 m (3.28 feet)	Lowest point 1000 mm (39.37 in) below surface, or highest point 150 mm (5.91 in) below surface, whichever is deeper Duration: 30 minutes
8	Immersion beyond 1 m (3.28 feet)	Depth specified by manufacturer, usually less than 3 m (9.84 feet)
9K	Power jets of water at high temperature	14–16 liters (3.70–4.23 gallons) per minute at a pressure of 8000–10000 kPa / 80–100 bar, distance of 0.1–0.15 m (3.94–5.51 inches). Temperature: 80 °C (176.00 °F)