

IP RATINGS EXPLAINED

IP, short for Ingress Protection, is an **internationally accepted standard** for indicating how well electronic equipment, devices, or components are protected against solid objects and liquids.

High IP ratings are commonly considered important for outdoor digital signage application, but indoor and semi-outdoor units should be ingress-protected as well to prevent corrosion and electrical shortcut – for **maximum uptime and lifespan**.

The infographic explains IP ratings for dust and water protection. It features a central 'IP 65' rating with two circular icons: a red one with a broom labeled 'The first digit is for DUST' and another red one with a water drop labeled 'The second digit is for WATER'. Below these are two columns of ratings from 0 to 9k, each with a corresponding icon in a grey circle. The first column (Dust) includes icons for a hand pointing, a wire, a broom, and a dust cloud. The second column (Water) includes icons for water drops, a spray nozzle, a high-pressure nozzle, a water immersion tank, and a steam nozzle.

Dust Protection (First Digit)	Water Protection (Second Digit)
0 None	0 None
1 Foreign solid objects (> 50 mm)	1 Drops of water or condensation (falling vertically)
2 Foreign solid objects (> 12.5 mm)	2 Direct sprays of water (up to 15°; from vertical)
3 Foreign solid objects (< 2.5 mm)	3 Direct sprays of water (up to 60°; from vertical)
4 Foreign solid objects (> 1.0 mm)	4 Direct sprays of water (from all directions)
5 Dust (limited, non-harmful ingress)	5 Low-pressure water jets (from all directions)
6 Dust (zero dust ingress)	6 High-pressure water jets (from all directions)
	7 Temporary immersion in water (up to 1 m)
	8 Continuous immersion in water (up to 2 m; user-defined)
	9k High-pressure steam jets (from all directions)

IP65: THE APPROPRIATE LEVEL OF INGRESS PROTECTION YOUR DIGITAL SIGNAGE REALLY NEEDS

With its IP65 rating and leading filtration efficiency, GORE Direct Air Cooling perfectly protects your entire enclosure from field-related ingresses, such as air pollution, dust and diesel particles, salt, rain, and ocean spray, rendering your digital signage fit for outdoor, semi-outdoor and indoor use.



This way, your electronic components will not fail from corrosion or soiling, giving your digital signage the reliability and uptime common systems can only dream of.

Enclosure vs. single components

Digital signage solutions using standard filter technology can have single components with high IP rating, i.e. a screen with IP68, but not for the entire enclosure, making it fit only for indoor use. Unlike other filter solutions, GORE Direct Air Cooling ensures an IP65 rating for the whole enclosure making it the only one suitable for **outdoor and semi-outdoor application**. **More information: www.gore.com/digitalsignage**

It's not always about the highest IP, it's about the most suitable for your application and environment.
