IK Rating

In areas prone to vandalism, camera housing must be built especially robust, able to withstand multiple violent physical assaults. Vandal dome type cameras are a prime example of this kind of vandal-proof camera. IK ratings, based on the IEC 62262 international standard, are used to establish the level of protection of a particular camera/housing against mechanical impact. Two types of tests are employed in determining the IK rating: a drop test in which an object of certain mass is dropped directly onto the camera/housing and a strike test in which the camera/housing is hit with an object of certain mass and made of specified material.

level	impact energy (joules)	object	drop test	strike test	
		weight (kg)	height (cm)	radius (cm)	material
00	0	n/a	n/a	n/a	n/a
01	0.14	0.2	7.5	1	polyamide
02	0.2	0.2	10	1	polyamide
03	0.35	0.2	17.5	1	polyamide
04	0.5	0.2	25	1	polyamide
05	0.7	0.2	35	1	polyamide
06	1	0.5	20	1	polyamide
07	2	0.5	40	2.5	steel
08	5	1.7	29.5	2.5	steel
09	10	5	20	5	steel
10	20	5	40	5	steel

IP Rating

IP (or "Ingress Protection") ratings are used to define levels of effective sealing of electrical enclosures against intrusion from foreign bodies (tools, dirt, etc.) and moisture. The numbers that follow IP each have a specific meaning. 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. The second defines the protection level of the equipment inside the enclosure against harmful ingress of water.

first digit (intrusion protection)

level	object size protected against	effective against
0	—	no protection against contact and ingress of objects
1	> 50 mm	any large surface of the body, such as the back of a hand, but no protection against deliberate contact with a body part
2	> 12.5 mm	fingers or similar objects
3	> 2.5 mm	tools, thick wires, etc.
4	> 1 mm	most wires, screws, etc.

level	object size protected against	effective against
5	dust protected	ingress of dust is not entirely prevented, but it must not enter in sufficient quantity to interfere with the satisfactory operation of the equipment; complete protection against contact
6	dust tight	no ingress of dust; complete protection against contact

second digit (moisture protection)

level	protected against	testing for
0	not protected	—
1	dripping water	dripping water (vertically falling drops) shall have no harmful effect
2	dripping water when tilted up to 15°	vertically dripping water shall have no harmful effect when the enclosure is tilted at an angle up to 15° from its normal position
3	spraying water	water falling as a spray at any angle up to 60° from the vertical shall have no harmful effect
4	splashing water	water splashing against the enclosure from any direction shall have no harmful effect
5	water jets	water projected by a nozzle (6.3 mm) against enclosure from any direction shall have no harmful effects
6	powerful water jets	water projected in powerful jets (12.5 mm nozzle) 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)
8	immersion beyond 1 m	the equipment is suitable for continuous immersion in water under conditions which shall be specified by the manufacturer