

SNO	Product Category	Indian Standard across the product category	Product Description
1	 Automatic Data Processing Machine (ADPM)	IS 13252 (Part-1)	<p>An Equipment or Machine which is capable of performing automatic operations on the basis of data inputs. The operations performed by the machine can be storage, Manipulation, switching, management, movement, control, display, transmission or switching.</p> <p>Automatic Data Processing Machine (ADPM) automatically performs operations on the basis of data input and minimizes possible errors. Also, it increases the efficiency of the complete system by processing large amounts of data within a limited time frame.</p>
2	 Bluetooth Speakers	IS 616	<p>In the first hand, it is to be kept in mind that the input voltage has to be the same. Together with this, it must be highlighted that the class pertaining to the construction be the same.</p> <p>On the other hand, the design layout of the PCB has to be the same. Together with this the enclosure material should also be the same with an exception regarding the decorative parts and its associated differences.</p> <p>In the case of the power transformer, the system of insulation has to be the same. At the same time the power transformer must also follow the same design. If it's applicable then the rating of the battery should be the same, this is much applicable in case of the registered batteries.</p>
3	 CCTV Camera and Recorder	IS 13252 (Part-1)	<p>Closed-circuit television (CCTV), commonly known as video surveillance, is the use of video cameras to send a signal to a specific location and display it on a limited number of monitors. The transmission is not openly broadcasted, unlike broadcast television, and it may use point-to-point (P2P), point-to-multipoint (P2MP), or mesh wired or wireless lines. Despite the fact that practically all video cameras match this description, the word is most commonly used to describe those used for surveillance in locations that require extra security or ongoing monitoring.</p>

4		Copying Machine	IS 13252 (Part-1)	<p>A photocopier (also known as a copier or copy machine, and formerly known as a Xerox machine) is a machine that swiftly and inexpensively copies documents and other visual images onto paper or plastic film. Xerography is a dry process that uses electrostatic charges on a light-sensitive photoreceptor to attract and then transfer toner particles (a powder) onto paper in the shape of an image in most current photocopiers. Heat, pressure, or a combination of both are used to fuse the toner to the paper. Other technologies, such as inkjet, can be used by copiers, but xerography is the industry standard for office copying.</p>
5		Digital Camera	IS 13252 (Part-1)	<p>In the very first place, the first thing that must be adhered to is that the enclosure material should be the same with an exception in case of the differences related to the decorative parts.</p> <p>Second important thing in case of the digital camera is that there has to be invariably the same type of input voltage. Also, the design layout of the PCB must be the same. Subsequently, the ip rating must also be the same.</p> <p>Following it, with respect to the registered batteries, it must be resorted to having the same battery rating, if it seems applicable and feasible. It should also have the functionalities that ought to be the same. To exemplify, we can name printing.</p> <p>Last but not the least, if applicable, the adapter that is registered must entail the output rating similar to the Digital camera's input.</p>
6		Electronic Game	IS 616	<p>Any game that incorporates any sort of electronic to build an interactive system with which a player can interact is considered an electronic game. Because video games are today's most popular form, the two terms are sometimes used interchangeably. Handheld electronic games, standalone systems (e.g. pinball, slot machines, or electro-mechanical arcade games), and completely non-visual items are all common types of electronic games (e.g. audio games).</p>
7			IS 616	<p>A music-playing home stereo system that comes in a variety of sizes and designs. Modern music systems include an AM/FM tuner, CD player, amplifier, and speakers, whereas older models had a cassette player. They can play MP3 and other compressed audio formats on an optical</p>



[Electronic Music System](#)

disc, memory card, or streamed from a local network or the Internet, in addition to regular CD music files.

Bluetooth-enabled music systems are frequently used as speakers for mobile devices. For multi-room playback, they can also connect to satellite units. Some models include a dock for iPods, iPhones, and iPads with a Lightning connector. Boombox, Sonos, and Lightning connector are all examples.

8



[Fixed general purpose LED](#)

IS 10322 (Part-5/Sec-1)

When an electric current runs through a Light Emitting Diode (LED), it emits light. Light is produced when holes from p-type semiconductors recombine with electrons from n-type semiconductors. The wavelength of the light emitted is determined by the semiconductor material's band gap. Wider band gaps are found in harder materials with stronger molecular connections. Ultra-wide band gap semiconductors are aluminium nitride semiconductors.

9



[Induction Stove](#)

IS 302 (Part-2/Section-6)

Instead of using indirect radiation, convection, or thermal conduction, induction cooking uses direct induction heating of cooking pots. Induction cooking provides for high power and rapid temperature increases, as well as immediate adjustments in heat settings.

A cooking utensil is placed on top of a coil of copper wire with an alternating electric current travelling through it in an induction stove (or "induction hob"). An electrical current is wirelessly induced in the vessel by the resulting fluctuating magnetic field. Resistive heating is caused by a significant eddy current flowing through the vessel's resistance.

10



Inverter and
UPS

IS 16242 (P-1)

Uninterrupted Power Supply (UPS) is an acronym for uninterruptible power supply. It is used to prevent the interruption of equipment caused by a power outage, as the name implies. This system is primarily utilised with computers, where it supplies enough power for the computer to preserve data and safely shut down in the event of a power outage.

A rectifier converts AC to DC and charges the battery in a UPS. The inverter, which converts DC to AC, is attached to this battery. A controller is supplied to control the system's operation.

The UPS can only give power for 10 to 15 minutes. As a result, this is mostly for IT systems and electronic gadgets that may be harmed in the event of a power outage.

Inverters are electronic power converters. These devices' primary function is to convert DC to AC. Inverters use AC power from the mains and convert it to DC using a rectifier.

This DC is converted and used to charge a battery. Because industrial and residential systems run on AC power, the inverter converts the DC from the battery to AC. During a power outage, the inverter draws electricity from the battery and supplies it to the electrical equipment. These systems are used in the home to restore power following a power outage. No external power supply is required for the operation of inverters.

11



LED Dimmer

IS 60669-2-1

A device that conducts a dimming control operation within an LED lighting device is referred to as an LED dimmer. Solid state lighting is especially well suited for dimming applications since LEDs react instantly to changes in power input. The dimming operation is designed to modify the luminance or brightness of an LED luminaire in response to an external disturbance. An LED luminaire is equipped with an LED dimmer in order to reduce the LED luminaire's energy usage while maintaining its efficient operation. A multitude of dimmers are used to control the luminance of such a lighting fixture.

12

[LED Module](#)

IS 15885 (Part-2/Sec-13)

Light Emitting Diodes, or LEDs for short, work by applying a voltage to a semiconductor material, causing electrons to be knocked loose from the material's surface, resulting in the emission of light energy particles known as 'photons.' LEDs are essentially a way of converting electrical energy into light, which they do very well, with a conversion efficiency significantly greater to that of conventional incandescent and fluorescent lighting. They also have a longer lifespan and, in many circumstances, are brighter. There are also fewer environmental concerns when it comes to their disposal. LED lights are increasingly replacing incandescent and fluorescent lighting in both household and business settings, owing to their obvious advantages.

13

[Power Adapters](#)

IS 616

A Power adapter are generally known as AC to DC adapters is a type of an external power supply enclosed with an AC plug. Other common names Plug pack, plug-in adapter, adapter block, domestic mains adapter, line power adapter, wall wart, power brick, wall charger, and power adapter are some of the other frequent names. Chargers or rechargers are terms used to describe adapters for battery-powered electronics (see also battery charger). Electrical equipment that require electricity but do not have internal components to extract the required voltage and power from mains power are connected to AC adapters. An external power supply's internal circuitry is remarkably similar to the architecture of a built-in or internal power supply.

14

[Printer and Plotter](#)

IS 13252 (Part-1)

A printer is a computer device that creates a permanent representation of visuals or text, usually on paper. Bar code printers are an example of an expanded usage for printers, even though most output is human-readable. 3D printers, inkjet printers, laser printers, thermal printers, and air printers are among the several types of printers.

Whereas a plotter is a computer hardware device that prints vector graphics in the same way as a printer does. Rather than a series of dots like a standard printer, plotters employ a pen, pencil, marker, or other writing implement to create several, continuous lines onto paper. Wide-format printers have mostly replaced these devices, which were once commonly employed for computer-aided design. Plotters print schematics and other comparable applications on paper.

15



[Recessed LED](#)

IS 10322 (Part-5/Section-2)

A recessed light, also known as a pot light in Canadian English and can light (for canister light) in American English, is a light fixture that is fitted into a hollow aperture in the ceiling. It appears like light is shining from a hole in the ceiling, concentrating the light in a downward direction as a broad floodlight or narrow spotlight when it is fitted. Different forms of recessed lighting in a warehouse "Pot light" or "canister light" refers to recessed lighting that has a circular hole and a cylindrical lighting fixture, similar to a pot or canister.

A recessed lighting fixture is made up of three parts: the housing, the trim, and the bulb. The trim is the part of the light that is visible. When looking up into the fixture, it is the insert that is visible, as well as the thin lining around the light's border. The lamp holder is contained within the housing, which is mounted inside the ceiling. There are numerous types of bulbs that can be used in recessed lighting fixtures, with the quantity of heat created by the bulb being one of the most important factors to consider.

16



[Cooker](#)

Rice

IS 302 (Part-2/Section-15)

A rice cooker, sometimes known as a rice steamer, is a kitchen equipment that automatically boils or steams rice. A heat source, a cooking bowl, and a thermostat are all included. The thermostat regulates the heat by measuring the temperature of the cooking basin. Sensors and other components may be included in complex, high-tech rice cookers, which can also be multipurpose.

A simple rice cooker contains a primary body (pot), an interior cooking container, an electric heating element, and a thermostat.

The bowl is filled with rice and water, and it is heated to boiling point (100 °C, 212 °F).

When all of the water has been absorbed, the temperature can increase above boiling, causing the thermostat to trip.

17

[Scanner](#)

IS 13252 (Part-1)

An image scanner, often known as a scanner, is a device that scans photographs, written text, handwriting, or an item optically and converts it to a digital image. Variations of the desktop flatbed scanner, where the document is placed on a glass pane for scanning, are commonly used in offices. Hand-held scanners, which are used for industrial design, reverse engineering, test and measurement, orthotics, gaming, and other applications, have progressed from text scanning "wands" to 3D scanners. Large-format documents are often scanned with mechanically driven scanners that move the document, as a flatbed design would be unfeasible.

The image sensor in modern scanners is usually a charge-coupled device (CCD) or a contact image sensor (CIS), although the image sensor in drum scanners, which were created earlier and are still used for the best image quality, is a photomultiplier tube (PMT). A rotary scanner is a form of drum scanner that uses a CCD array instead of a photomultiplier for high-speed document scanning. Planetary scanners take photographs of delicate books and papers without touching them. All of these scanners generate two-dimensional photographs of subjects that are normally flat but occasionally solid; 3D scanners generate information about the three-dimensional structure of solid items.

18

[SetupBox](#)

IS 13252 (Part-1)

A set-top box (STB), also known as a cable box or a television decoder in the past, is an information appliance device that typically contains a TV-tuner input and displays output to a television set and an external source of signal, converting the source signal into content that can be displayed on the television screen or other display device. They can be found in cable television, satellite television, and over-the-air television systems, among other applications.

19



[Smart Speaker](#)

IS 616

With respect to the Display:

Firstly, pertaining to the type of display, it must be kept in mind that it remains the same. In addition, with respect to the input voltage, it should entail similarity.

Next in line, is about having the class of construction that entails the similarity. Also, the design layout pertaining to the PCB should be the same. The enclosure material should share the similarity with an exception of the decorative parts and its associated differences. The IP rating should also be the same in regards to the smart speakers with display.

With respect to without display:

In the first place, there has to be the input voltage being the same. The class of construction must also be the same along with the design layout pertaining to the PCB which has to be the same. Further, the enclosure material used should be the same with an exception in the decorative parts and the associated differences. Besides this, the IP rating is required to be the same.

In case of the power transformer, the insulation system has to be the same along with the design that is incorporated. If applicable, the rating of the battery has to resort to the similar basis. Also, the adapter that is registered must entail the similar output rating in parallel with the smart speakers input.

20



[Smart Watches](#)

IS 13252 (Part-1)

A smartwatch is a watch with additional functionality and connection in addition to the characteristics found in traditional timepieces. They accomplish this by including a computer system that not only performs the basic functions we expect, but also has the ability to handle some additional features. The term "smartwatch" refers to a wide range of gadgets that differ significantly in terms of design and performance.

21

[Television](#)

IS 616

In comparison to LCD TVs, LED stands for Light Emitting Diodes, which are more efficient and require less electricity. The best aspect is that it saves up to 30% on power and is relatively inexpensive due to its varied size and thickness. LED television is a cutting-edge form of entertainment. LED TVs are a wonderful alternative if you want to enjoy good picture quality television sets. LED TV has evolved into a smarter gadget since it now includes a variety of internet capabilities such as apps and streaming services, as well as the ability to connect to wireless devices such as smartphones. It can be used both with and without the internet

22

[Video Camera](#)

IS 616

The first thing to be marked in bold is pertaining to the video camera's type which can be with display or can be even without display. Following this, the enclosure material used must be the same with an exception with respect to the decorative parts and the related differences.

Next in line is the need to embrace the class of construction which should be the same. Further, the input voltage must remain the same. Along with this, the design layout pertaining to the PCB must also be the same.

It must also be highlighted that with regards to the mounting mechanism, it has to be the same. Handheld is the perfect example for this followed by the tripod. Further, it is to be ensured that the adapter which is registered must have the output rating that ought to be the same as that of the video camera's input.

23

[Visual Display Unit \(VDU\)](#)

IS 13252 (Part-1)

An electronic visual display, often known as a screen, is a display device that allows images, text, or video to be displayed without leaving a permanent trace. Television sets, computer monitors, and digital signage are examples of electronic visual displays. Because it is a display device for the presentation of images, plain text, or video transmitted electronically without producing a permanent record, an overhead projector (along with the screen onto which the text, images, or video is projected) could reasonably be considered an electronic visual display by the above definition. They're also everywhere in mobile computing apps like tablets, smartphones, and information appliances.

24

[Webcam](#)

IS 616

In the first place, pertaining to the webcam as the finished product, it should be made sure that the enclosure material must be of the same type with an exception in case of the decorative parts and the associated differences.

The very next thing revolves around the need to have the design layout pertaining to the PCB which ought to be of the same type. Further it is with respect to the type of the webcam, which can include the webcams having the microphones or wireless etc.

It has to be made sure that the webcam should have the ip rating that must be the same. Also, the input voltage should be the same as well. Further, with respect to the rating of the battery it has to be ensured that it should be the same, especially in case of the registered batteries. Also, it must be remembered that the mounting mechanism has to be the same.

25

[WirelessMicrophone](#)

IS 616

In the first place, it's about the microphone and its associated types which have to be the same and must find its basis on the external transmitters which can range from the handheld to the headset. Built-in type can also be the basis of the microphones.

The wireless microphone would entail the same enclosure material with an exception showcasing the decorative parts with the differences.

Next in line speaks about the fact that the acceptance would be made pertaining to any change in aesthetics or regarding the button's location, only when it is duly received by the lab pinpointing that they certainly would not have any effect on the safety.

The important thing to be taken into account is regarding the need to have similar design of the PCB. It also includes the need to have a similar layout concerning the PCB. Further it is to be ensured that the same ip rating has to be resorted to in case of mic and also the transmitter.

Another thing to be taken care of is regarding the transmitter and of course the mic. It is to be ensured that these two things must embrace having the input voltage that is the same. In case of the batteries, especially the ones that are registered, must have the same rating.

26



[Amplifier with Input power 2000W](#)

IS 616

An amplifier, often known as an electronic amplifier or (informally) amp, is a device that can boost the power of a signal (a time-varying voltage or current). It's a two-port electrical circuit that uses power from a power source to boost the amplitude of a signal applied to its input terminals, resulting in a signal with a correspondingly higher amplitude at the output. The gain of an amplifier is defined as the ratio of output voltage, current, or power to input voltage, current, or power. A circuit with a power gain greater than one is known as an amplifier

27



[Cash Register](#)

IS 13252 (Part-1)

A cash register, often known as a till or automated money handling system, is a mechanical or electronic instrument used at a point of sale to register and calculate transactions. It's frequently connected to a drawer and used to keep cash and other valuables safe. A printer is generally connected to a modern cash register so that receipts can be printed for record-keeping purposes.

28



[Electronic clock](#)

IS 302-2-26

An electric clock, as opposed to a mechanical clock, is one that is powered by electricity rather than a hanging weight or a mainspring. Before quartz clocks were introduced in the 1980s, the phrase was commonly used to describe electrically driven mechanical clocks. The first experimental electric clocks were built in the 1840s, but they were not routinely produced until the 1890s, when mains electric power became available. The synchronous electric clock replaced mechanical clocks as the most popular type of clock in the 1930s.

29



[Laptop/Notebook/Tablet](#)

IS 13252 (Part-1)

A laptop, also known as a laptop computer or notebook computer, is a tiny, portable computer featuring a screen and an alphanumeric keypad. Although 2-in-1 PCs with a detachable keyboard are commonly marketed as laptops or as having a laptop mode, they typically have a clam shell form factor, with the screen attached on the inside of the upper lid and the keyboard mounted on the inside of the lower lid. Laptops are suited for mobile use because they can be folded shut for travelling. Its name originates from the fact that it was deemed practical to use while sitting on a person's lap

30



[LED Flood Light](#)

IS 10322 (Part 5/Section-5):
2013

LED floodlights are high-intensity, wide-beamed artificial lights that are frequently used to brighten outdoor spaces. They are typically utilised on playing fields when a sporting event is place in low light circumstances. They can also be used for an outdoor event that necessitates a large amount of lighting. They are used by large enterprises, industries, and organisations to illuminate their compounds at night. The only way to understand why they are efficient is to understand how they work.

31



[LED Head Lamp](#)

IS 10322 (Part 5/Section-6):
2013

LED headlight technology is the most cutting-edge technology for automotive headlamps. Light Emitting Diode is the abbreviation for Light Emitting Diode. It has a number of technological benefits over its competitors, such as halogen and xenon headlamps. As a result, these headlamps are gaining a lot of traction in the passenger vehicle market. The most significant advantage of LED lighting is that it produces light with a colour temperature of 5500 kelvin, which is quite close to daylight. The colour temperature of this light is even closer to that of Bi-Xenon headlamps. As a result, the driver's eyes are not overworked. When compared to other headlamps, LED headlamps have excellent visibility in dusty and foggy conditions. As a result, LED headlamps combined with adaptive headlamp technology are an excellent safety combination.

32



[LED Lightning Chain](#)

IS 10322 (Part 5/Section-7):
2013

An LED lighting chain (also known as an LED tape or ribbon light) is a flexible circuit board with an adhesive backing that is populated with surface mounted light-emitting diodes (SMD LEDs) and other components. LED lighting chain have traditionally been used for accent lighting, backlighting, job lighting, and decorative lighting. LED lighting chain can now be used for high-brightness task lighting, fluorescent and halogen lighting fixture replacements, indirect lighting applications, ultraviolet (UV) inspection during manufacturing processes, set and costume design, and even plant growth thanks to improved luminous efficacy and higher-power SMDs.

33



[LED Luminaires for Emergency Lights](#)

IS 10322 (Part 5/Section 8):
2013

When a building's main power source goes out, emergency lights ensure that there is still light. They are installed as standard in business workplaces and new-build residential residences as battery-powered gadgets that turn on automatically. They are a safety feature that allows individuals to see and securely navigate their way through a building if the main power goes out. People are frequently led to emergency exits and to safety as fast as possible using emergency illumination.

34



[LED Luminaries](#)

10322 (Part 5/Sec 1)

A full lighting unit containing LED-based light emitting elements and a corresponding driver, as well as pieces to disperse light, position and protect the light emitting elements, and link the unit to a branch circuit, is referred to as an LED luminaire. LED packages (components), LED arrays (modules), and LED lamps are all examples of LED-based lighting emitting elements. The LED luminaire is designed to plug into a branch circuit directly.

Luminaires are complete LED solutions that include an LED bulb and driver. These single units are noted for their dependability and are designed to be quick and easy to install.

35



[LED Rope Lights](#)

IS 10322 (Part 5)Section 9:
2017

Rope lighting has been around for a long time and has a wide range of applications. It's essentially a long cylindrical tube with an inside light source positioned every few inches to provide the appearance of "glowing" or "twinkling" light. Plastic, epoxy, or other clear materials that enable light to pass through can be used for the tube. Because of the low light intensity, rope lighting is primarily used for ornamental purposes.

They're best used for decorative purposes or accent lighting with very low light levels. They may readily wrap around objects like trees or be bent into shapes and letters due to their 360-degree viewing angles.

36



[Mail Processing machine](#)

IS 13252 (Part 1)

Machines were introduced to boost the efficiency of the Post Office Department. The first was a cancelling machine, which eliminated the need for employees to manually cancel mail piece by piece. Culling machines sorted mail by size, ensuring that the appropriate pieces were forwarded to the appropriate processing units. Machines called edger-stackers were created to assist other machines by stacking mail for speedier processing. Facer-canceller machines could recognise stamps and cancel them. Conveyor systems like "Mail-Flo" assisted in the movement of mail within post offices. Hamper-dumpers made it easier for staff to dump big amounts of mail. Workers sorting mail were given a mechanical hand by parcel sorting machines and letter sorting machines.

37

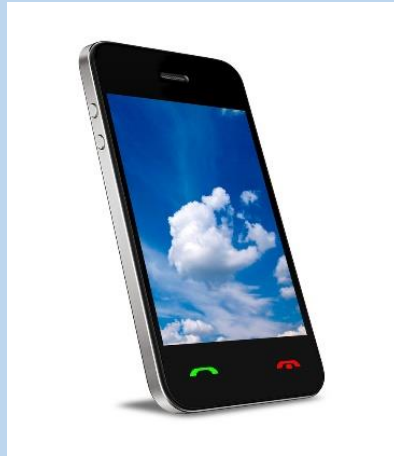


[Microwave Oven](#)

IS 302-2-25

A microwave oven (also known as a microwave) is an electric oven that heats and cooks food by exposing it to microwave-frequency electromagnetic radiation. In a process called as dielectric heating, this causes polar molecules in the meal to rotate and produce thermal energy. Because excitation is rather consistent in the exterior 25–38 mm (1–1.5 inches) of a homogeneous, high water content food item, microwave ovens heat foods fast and efficiently.

38



[Mobile Phones](#)

IS 13252 (Part 1)

A mobile phone, also known as a cellular phone, cell phone, cellphone, handphone, or hand phone, is a portable telephone that can make and receive calls over a radio frequency link while the user is moving within a telephone service area. It is sometimes shortened to simply mobile, cell, or just phone. The radio frequency link establishes a connection to a mobile phone operator's switching systems, allowing access to the public switched telephone network (PSTN). Because modern mobile telephone services are based on a cellular network design, mobile phones in North America are referred to as cellular phones or cell phones. Text messaging, MMS, email, Internet access, short-range wireless communications (infrared, Bluetooth), business applications, video games, and digital photography are all supported by digital mobile phones (2G) in addition to telephony. Mobile phones with only those characteristics are referred to as feature phones; mobile phones with significantly more advanced processing capabilities are referred to as smartphones.

39



Passport Reader

IS 13252 (Part 1)

The international standard can be followed by a passport reader that supports all passports from all nations. ID cards, residence permits, driver licences, and other ID or travel-related papers can all be scanned with some scanners. Machine Readable Zone (MRZ) data on passports, Machine Readable Travel Documents, ID cards, and in rare situations 3-track magnetic cards is read.

A scan button and a USB connection are included in the most recent passport reader systems. They are built for high-speed scanning in a variety of contexts, including international hotel check-ins, to be rapid, reliable, and perfect.

A high-quality passport reader prepares to scan in less than a second and scans a document in less than a second. A decent reader will be able to scan documents at a resolution of 300 dpi or higher. It can assure accurate and speedy data gathering in high-traffic areas like airports, hotel check-ins, and security checkpoints. It will have sophisticated image processing technologies as well as IP picture enhancing and processing software.

40



Point of Sale

IS 13252 (Part 1)

A point of sale terminal (POS terminal) is an electronic device used in retail locations to process card payments. In general, a POS terminal does the following:

Takes information from a customer's credit or debit card and enters it into a computer.

Checks whether a customer's bank account has sufficient funds.

Transfers money from the seller's account to the customer's account (or at least, accounts for the transfer with the credit card network)

The transaction is recorded, and a receipt is printed.

41



[Power Bank](#)

IS 13252 (Part 1)

Power banks are portable power sources that can be used to charge battery-powered devices such as cell phones and other similar devices with a USB interface. They can be charged through USB, Bluetooth, or wirelessly.

Power banks are becoming more widespread as we use more battery-powered devices: everything from cell phones to battery-powered headphones, portable speakers, and MP3 players can be charged using a power bank. They can be used as a portable charger. All they require is a USB charging port.

Power banks are available in a variety of shapes and sizes to accommodate a wide range of people and their demands.

Power banks have been increasingly popular in recent years because they give a quick and handy way to charge smartphones and other gadgets when they are not connected to the mains. For those devices that can be charged wirelessly, wireless charging power banks have also been produced.

42



[Self Blast LED](#)

IS 16102(Part 1)

Self-ballasted LED lamps signifies a unit containing a lamp cap and an LED light source, as well as any extra elements required for stable operation of the light source, that cannot be dismantled without causing permanent damage.

The ballast regulates the current to the lamps and provides enough voltage to start them in a fluorescent lighting system. A fluorescent light connected directly to a high voltage power source would rapidly and uncontrollable grow its current consumption if it didn't have a ballast to limit it

43



[Smart Card Reader](#)

IS 13252 (Part 1)

Smart cards, which are a form of plastic technological card with a built-in chip used for electronic activities such as personal identification, access control, authentication, and financial transactions, are read by smart card readers. This type of data is obtained or "read" by smart card readers. These simple-to-use gadgets read data stored on 13.56 MHz contact or contactless smart cards.

The card must be manually placed into the reader by the user in contact smart card readers. Government IDs, e-commerce transactions, university IDs, network security, vending, meal plans, loyalty, electronic cash, and health care cards, to name a few, are all examples of applications that demand increased security.

44



[Telephone Answering Machine](#)

IS 13252 (Part 1)

An answering machine, also known as a telephone messaging machine (or TAM) in the UK and some Commonwealth countries, ansaphone or ansafone (from a trade name), or telephone answering device (TAD), is a device that answers phones and records callers' messages. If a phone rings a certain number of times and no one is available to accept the call, the answering machine will activate and play either a generic announcement or the voice of the person being contacted, notifying that no one is available to answer the phone at this time. A beeping tone follows the announcement, prompting the caller to record a message when the tone stops.

45



[Wireless Keyboard](#)

IS 13252 (Part 1)

A wireless keyboard is a computer keyboard that uses radio frequency (RF), such as WiFi and Bluetooth, or infrared (IR) technology to interact with PCs, tablets, or laptops. These days, it's typical for wireless keyboards to be accompanied by a wireless mouse.

Infrared-based wireless keyboards use light waves to communicate with other infrared-enabled devices. A wireless keyboard, on the other hand, communicates utilising radio frequency waves that span from 27 MHz to 2.4 GHz. The majority of today's wireless keyboards use the 2.4 GHz radio band. [requires citation] Bluetooth is another wireless keyboard technology that is commonly utilised. The Bluetooth protocol is used to connect and communicate between these gadgets and their parent device.