

85.28 - Monitors and projectors, not incorporating television reception apparatus; reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus.

- Cathode-ray tube monitors :

8528.42 -- Capable of directly connecting to and designed for use with an automatic data processing machine of heading 84.71

8528.49 -- Other

- Other monitors :

8528.52 -- Capable of directly connecting to and designed for use with an automatic data processing machine of heading 84.71

8528.59 -- Other

- Projectors :

8528.62 -- Capable of directly connecting to and designed for use with an automatic data processing machine of heading 84.71

8528.69 -- Other

- Reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus :

8528.71 -- Not designed to incorporate a video display or screen

8528.72 -- Other, colour

8528.73 -- Other, monochrome

This heading includes :

- (1) Monitors and projectors, not incorporating television reception apparatus.
- (2) Television reception apparatus, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus, for the display of signals (television sets).
- (3) Apparatus for the reception of television signals, without display capabilities (e.g., receivers of satellite television broadcasts).

Monitors, projectors and television sets utilize different technologies, such as CRT (cathode-ray tube), LCD (liquid crystal display), DMD (digital micromirror device), OLED (organic light-emitting diodes) and plasma, to display images.

Monitors and projectors may be capable of receiving a variety of signals from different sources. However, if they incorporate a television tuner they are considered to be reception apparatus for television.

**(A) MONITORS CAPABLE OF DIRECTLY CONNECTING TO AND
DESIGNED FOR USE WITH AN AUTOMATIC DATA PROCESSING
MACHINE OF HEADING 84.71**

This group includes monitors which are capable of accepting a signal from the central processing unit of an automatic data processing machine and provide a graphical presentation of the data processed. These monitors are distinguishable from other types of monitors (see (B) below) and from television receivers.

The monitors of this group may be characterised by the following features :

- (i) They usually display signals of graphics adaptors (monochrome or colour) which are integrated in the central processing unit of the automatic data processing machine;
- (ii) They do not incorporate a channel selector or video tuner;
- (iii) They are fitted with connectors characteristic of data processing systems (e.g., RS-232C interface, DIN, D-SUB, VGA, DVI, HDMI or DP (display port) connectors);
- (iv) The viewable image size of these monitors does not generally exceed 76 cm (30 inches);
- (v) They have a display pitch size (usually smaller than 0.3 mm) suitable for close proximity viewing;
- (vi) They may have an audio circuit and built-in speakers (generally, 2 watts or less in total);
- (vii) They usually have control buttons situated in the front panel;
- (viii) They usually cannot be operated by a remote control;
- (ix) They may incorporate tilt, swivel and height adjusting mechanisms, glare-free surfaces, flicker-free display, and other ergonomic design characteristics to facilitate prolonged periods of viewing at close proximity to the monitor;
- (x) They may utilize wireless communication protocol to display data from an automatic data processing machine of heading 84.71.

**(B) MONITORS OTHER THAN THOSE CAPABLE OF DIRECTLY
CONNECTING TO AND DESIGNED FOR USE WITH AN AUTOMATIC
DATA PROCESSING MACHINE OF HEADING 84.71**

This group includes monitors which are capable of receiving signals when connected directly to the video camera or recorder by means of composite video, s-video or co-axial cables, so that all the radio-frequency circuits are eliminated. They are typically used by television companies or for closed-circuit television (airports, railway stations, factories, hospitals, etc.). They can, moreover, have separate inputs for red (R), green (G) and blue (B), or be coded in accordance with a particular standard (NTSC, SECAM, PAL, D-MAC, etc.). For reception of coded signals, the monitor must be equipped with a decoding device covering (the separation of) the R, G and B signals. They are not fitted with connectors characteristic of data processing systems, and they do not incorporate tilt, swivel and height adjusting mechanisms, glare-free surfaces, flicker-free display, and other ergonomic design characteristics to facilitate prolonged periods of viewing at close proximity to the monitor. They do not incorporate a channel selector or video tuner.

(C) PROJECTORS

Projectors enable the image normally reproduced on the screen of a television receiver or of a monitor to be projected on an external surface. They may be based on CRT or flat panel (e.g., DMD, LCD, plasma) technology.

(D) RECEPTION APPARATUS FOR TELEVISION

This group includes apparatus whether or not designed to incorporate a video display or screen, such as :

- (1) Receivers of television broadcasts (terrestrial, cable or satellite) which do not include a display device (CRT, LCD, etc.). These apparatus receive signals and convert them into a signal suitable for display. They may also incorporate a modem for connection to the Internet.

These receivers are intended to be used with video recording or reproducing apparatus, monitors, projectors or televisions. However, devices which simply isolate high-frequency television signals (sometimes called video tuners) are to be classified as parts in **heading 85.29**.

- (2) Television receivers for industrial use (e.g., for reading instruments at a distance, or for observation in dangerous localities). With this apparatus the transmission is often by line.
- (3) Television receivers of all kinds (LCD, plasma, CRT, etc.) used in the home (television sets), whether or not incorporating a radio-broadcast receiver, video cassette recorder, DVD player, DVD recorder, satellite receiver, etc.

85.28

PARTS

Subject to the general provisions regarding the classification of parts (see the General Explanatory Note to Section XVI), parts of the apparatus of this heading are classified in **heading 85.29**.

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The heading **excludes, inter alia** :

- (a) Video recording or reproducing apparatus (**heading 85.21**).
- (b) Special purpose vehicles (e.g., vans for broadcasting) permanently equipped with television receivers or other apparatus of this heading (generally **heading 87.05**).
- (c) Cinematographic projectors (**heading 90.07**) and image projectors of **heading 90.08**.