

Requirement / need	Feature	Detail
Product identifies temperature	Resistance Temperature Detector (RTD)	Can change the resistance based on temperature
Product identifies temperature	Thermistors	Measures temperature and limit currents based on the temperature
Product identifies temperature	Thermocouple	Only measures temperature
Product identifies temperature	Infrared Sensors	Senses the infrared radiation from what product emits or reflects
Product identifies temperature	Thermometers	Displays the temperature that it detects
Product blocks lights	Roller Blinds	Provides a lot more coverage from the sun
Product blocks lights	Vertical Blinds	Long individual blinds which provide coverage from the sun (though some light escapes)
Product blocks lights	Venetian Blinds	Horizontal blinds with adjustable slats which provide sun coverage (though some light escapes)
Product blocks lights	Cellular shades	The blind slates are shaped like honeycombs giving good insulation and provides better coverage from the sun
Product has a noise alert	Speaker	Allows the product to speak their task
Product can roll an object down	Motor	Can roll the blinds down automatically
Product can roll an object down	Manual spring-loaded mechanism	Product allows users to manually move the blinds themselves
Product can lift object	Cordless blinds	Users would just need to pull or push on the blinds
Product can connect to user wirelessly	Bluetooth	Can connect to user's devices to adjust to their wants/needs
Product can connect to user	Wifi	Users connect to the network

wirelessly		
Product has a manual option to roll down a blind	Blind wand	Allows users to manually lift blinds by twisting the stick
Product has a manual option to roll down a blind	String cord	Allows users to manually lift blinds by pulling the strings
Product can do timer tasks	Built-in time increments	Within the coding, the device is able to do tasks dependent on the code
Product can detect the light levels	Photodiodes	A semiconductor that can detect light and convert it into electrical current/voltage
Product can detect the light levels	Photoresistors	Can have the resistance of product decrease based off of light intensity
Product can detect the light levels	Phototransistors	Light-activated transistor which can amplify an electrical current
Product can display settings	OLED Panel	Displays the text that the user desires to see
Product can detect light levels	Photo Sensor	Can detect light or electromagnetic radiation which then is converted to an electrical signal
Product can vocalize their task completion	Text-to-Speech	Allows the product to voice their completion
Product provides clear notifications	Dot Matrix Display	Can display the input through a display