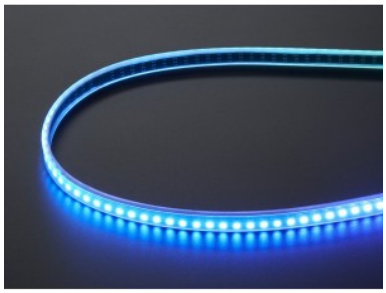
PRODUCT NAME : Adafruit Mini Skinny NeoPixel Digital RGB LED Strip - 144 LED/m - 1m WHITE



PRICE : Rs 7,499.00
SKU : RM3333

DESCRIPTION

So thin. So mini. So teeeeeeny-tiny. It's the 'skinny' version of our classic NeoPixel strips!

These NeoPixel strips have 144 digitally-addressable pixel Mini LEDs per meter and are very affordable and are only 7.5 mm wide (0.3") if you remove the strip from the casing. **This is the strip with white flex PCB, its identical to the black 144 LED/meter except it has a different color mask on the flex strip**

There are some things to watch for:

- These LED's use about 40 Watts max (~8 Amps @ 5V) per meter. The max rating is assuming all the LEDs are on full white, usually the actual current for colorful design is about 1/3 to 1/2 the max current. A good power supply such as our 5V 24 or 10A supply is key!
- Second, to get high density, the controller chip is inside the LED, which is kind of cool, but also means that the chip only uses a single pin for input and a single pin for output. The protocol used is very very timing-specific and can only be controlled by microcontrollers with highly repeatable 100nS timing precision. We have example code for using with the Arduino Uno/Mega microcontroller at 8MHz and 16MHz, and with a little effort you can use with the Raspberry Pi, or Beagle Bone Black, but it will not work with the Basic Stamp, NETduino, any other interpreted/virtual machine microprocessor or any processor slower than 8 MHz. For those processors, check our DotStar digital LED strip which has SPI-like input/output and works easily with Pi, NETduino, and other processors.
- The way the pixels are controlled by an Arduino, the entire strip must be buffered in memory, and we've found many Arduino UNO projects only have about 1500bytes of RAM available after all the extras are included - enough for about 500 LED pixels. If you want to drive the entire strip and have some other libraries included, you may need to use a Mega.

There are 144 RGB LEDs per meter, and you can control each LED individually! Yes, that's right, this is the digitally-addressable type of LED strip. You can set the color of each LED's red, green and blue component with 8-bit PWM precision (so 24-bit color per pixel). The LEDs are controlled by shift-registers that are chained up down the strip so you can shorten or lengthen the strip. Only 1 digital output pin are required to send data down. The PWM is built into each LED-chip so once you set the color you can stop talking to the strip and it will continue to PWM all the LEDs for you

The strip is made of flexible PCB material, and comes with a weatherproof sheathing. You can cut this stuff pretty easily with wire cutters, there are cut-lines every 7mm / 0.27" (1 LED each). Solder to the 0.1" copper pads and you're good to go. Of course, you can also connect strips together to make them longer, just watch how much current you need! We have a 5V/4A supply that should be able to drive 1 meter and a 5V/10A supply that can drive up to 10 meters (depending on use) **You must use a 5V DC power supply to power these strips, do not use higher than 6V or you can destroy the entire strip**

These come in 1 meter reels with a 2 or 3-pin JST SM connector on each end and separated power/ground wires. **If you buy multiples, you will get multiple 1 meter strips, they will not come on a continuous strip**!

To wire up these strips we suggest picking up some JST SM plug and receptacle cables. You'll want one of each, one wire is for ground the other is for signal. For the power wire, you will also probably want a 2.1mm DC jack to wire in so you can connect one of our wall adapters to power it.