

**StripsTester**

**KnowHow**

# Measurements

# Voltage

Used measurement equipment known to us:

* YoctoVolt
* INA219

If we need to measure DC voltage to 26VDC, we can use INA219, configured as voltmeter (originally it is wattage meter). INA219 uses I2C as the main protocol, so our device must handle I2C signals.

Any DC voltage, greater or less than 26VDC and less than 230VDC, can be measured by YoctoVolt voltmeter. It is galvanic isolated, so no harm can be done at our master device.

NOTE: Before using YoctoVolt, be sure to upgrade its firmware to the latest version, because it takes less time to measure DC voltage!

1. Flowcharts
   1. Auto.py script

Auto.py script is used to initialize StripsTester.

[auto.py flowchart](https://www.draw.io/?lightbox=1&highlight=0000ff&edit=_blank&layers=1&nav=1&title=Untitled%20Diagram.drawio" \l "R5Vpbj%2BI2FP41SO3DIBLnAo8DTKcrdbdV2aqdvlQmMSSaEGcdM0B%2F%2FdqJc7EdBkoTMgheiI%2Fv53znmgzAbLN%2FJjAJPmMfRQNz5O8HYD4wTcNwAfvjlENOccaCsCahLwZVhEX4LxLEkaBuQx%2Bl0kCKcUTDRCZ6OI6RRyUaJATv5GErHMm7JnCNNMLCg5FO%2FTP0aZBTx%2Faoov%2BMwnVQ7GyMRM8GFoMFIQ2gj3c1EngagBnBmOZPm%2F0MRZx5BV%2FyeT8d6S0PRlBMz5mQfN4t3Wf49%2B7xGX2D82D6hXgPYpU3GG3FhX%2BB29gLOPe2FA%2BTAz%2B5R8KEilvQQ8Eagrexj%2FjqowGY7oKQokUCPd67Y2BgtIBuItYy2KPYBxGK9kcvYJRsYXhCeIMo4fuLCcC28ykCSkbB2V0lGMMStKAmFCBoUGBhXS5dsYs9CI79B%2B6ZGvcGphOxXacrzO5U55bzbYuLjoc0g%2FkjG2Bayb7qZE9r%2Fr%2BgjOHpV5RSRBolkW%2FCzpzvk8%2FSBMRYTWUppJTgVzTDESaMEuMY8SOFUaSQYBSuY9b0mGjYEcCUCy5kWvEoOjah7%2FNtGsUuA6MFyTPRS5JvEDwYNwje7krwlib4L4juMHnNTAy7va4sAd4st%2Bl1FMUxZXY1KYpp6%2FyadMUvu0FRFAah2H%2Fk9pqjLoJpGnoyX9A%2BpH9xSA1t0Xqp9cz3Am1Z41A0Ynb42iTefKn3VdOy1kGCLPI116BIgF0Ab4mHThtYCska0VOI0iVak5j9DsAJiiAN3%2BTjNklR7PAbDjP7JABjFRayAIylACG%2FpphV9zHqQmN5IUNFVM4HbaEMVOW1L8eZ0x7OjBrKKsx9WJxZt4Az4Cg4c1rCWWnhTuCMSR4easMSPiB9RzHGbuM%2BFWzzFVsFsas7l1%2FP8O3n%2B2yCWAACl9lSHIaCC2xdezqw5xyYYBrBJYqm0HtdZ%2B68CBAGJlhlv%2FdclQjGxRaDUjp1YB%2FX36N%2B7YGpl%2BGAVqBoANlQyfPxapWiTixUkdfcoSs810QZ5kfyhcC41EaZctAK1Gi0Y19o6NmJklcUecSSFCnE86ev7BFueEwaL9MkR1HKTWTDaBxnea4XhCxp%2BEgBb8nq3gJeo8VI5MbUvMDdaT2f9KrnpqznlqqeZ%2Bu5YjBstdzQtZ7r8cLFULuxoPd8qI37hJo9UqCmIuRcqNkqZtU8raWwV90HTGwFuR2EvbmMJBzPIl6OMkeK36K4kvk7DujK5UlLSW7KtuSEGlCmCrE9JzTROPpH4kPKWbpL4D%2FpNkkiliHEdMgi9pXu4MvCY8%2BsBbY5lIMp22pgrtXg4dUMs73ab9%2BBvCEZ3coGX8Hsjm%2FCw5uKY3bcC82uqVQbnI6qDarZtd0rVBsKvtbThMWnuWZ1%2Bw3vFfV3QN8BfqHt9xjgT85U%2F2NivVKAbylae3GxcaIspFYEOg7wTdAe1G4swC9f%2BZ%2BEWq%2BeRjXcjmtfBjW2kGLpXBW1bfkae9x45G59jV4VuZvSdq7FR33caGhOHEcSSfHu8P9WulXn%2BaCAs7tit6m%2FJ78XJ3m%2B5XJ7dZKmpRqcS4sTar3bHV%2FZTeofGbw8Le7Fuhx5r1u9OTPGhvL5VDvWxZJtSwmnK1gXvfD5%2B5a%2FkqAsZWF%2FPnoLPV7r%2BIFmOcwwOfyoweHqpQzniJacqhJ1V8jQq0RP%2FAOmUULwmsBN7yyzJq5qozpkGmtW32TmUK2%2BbAVP3wE%3D)