```
5A Module       20A Module      30A Module
185mV/Amp       100mV/Amp       66mV per Amp
```

Let us assume that the microcontroller you are using has a 10-bit ADC and operates at 5V with a reference voltage of 5V for ADC conversion in that case the microcontroller will read the values of ADC from 0 to 1024.

Then you can use the formulae below to calculate the Output Voltage from ADC values.

```
Vout (mV) = (ADC Value/  1023)*5000
```

After calculating the output voltage we can, calculate the value of current from the voltage using the below formulae

```
Current Through the Wire (A) = (Vout(mv)-2500)/Scale factor
```

Note that the value of scale factor changes for every module based on its range. The values of scale factor for all three modules are given in the specifications above.

From:
https://kornequipped.com/mywiki/ - **KornEquipped WiKi**

Permanent link:
https://kornequipped.com/mywiki/doku.php?id=acs712_modules

Last update: **2026/01/30 23:44**