SCOM – Setting the analog input correction factors

SCOM-100 contains factory set analog input correction factors permanently stored in the system EEPROM memory.

This procedure applies only if the appropriate correction factors have been erased by the user, e.g., if the user tried to upgrade SCOM's firmware to version 1.0.6 without following the correct procedure.

Prior to performing the following procedure you need:

- A voltage generator,
- A current generator,
- A precise multimeter

Please perform the procedure described below:

Connect SCOM unit to a PC (through RS232 port) and establish a hyper terminal connection (Baudrate: 57600 bps, Data bits: 8, Parity: None, Stop bits: 1, Flow control: Hardware).

Issue commands:

```plaintext
atsms="8100,0,1,2000,2000"
atsms="8100,0,2,2000,2000"
atsms="8110,0"
```

Connect the voltage generator to AI1 and provide 0.7 Volts. Measure with the multimeter what you provide as voltage.

The theoretical measured value $Y$ is $0.7 \times 4095 = 2867$

Issue command:

```plaintext
atsms="3200,0,1"
```

and write down the $X$ value.

Issue command:

```plaintext
atsms="8100,0,1,X,Y"
```

Eg. If what you get using the 3200 command is $X=2850$ then you should issue the recalibration command: `atsms="8100,0,1,2850,2867"` for AI1.

Connect the current generator to AI2 and provide 14 mA. Measure with the multimeter what you provide as current.

The theoretical measured value $Y$ is $(14/20) \times 4095 = 2867$

Issue command

```plaintext
atsms="3200,0,2"
```

and write down the $X$ value.

Issue command:

```plaintext
atsms="8100,0,2,X,Y"
```

Eg. If what you get using the 3200 command is $X=2850$ then you should issue the command `atsms="8100,0,2,2850,2867"` for AI2.

At last issue command:

```plaintext
atsms="8110,70"
```

Power down the unit and repower it.

SCOM is now recalibrated!