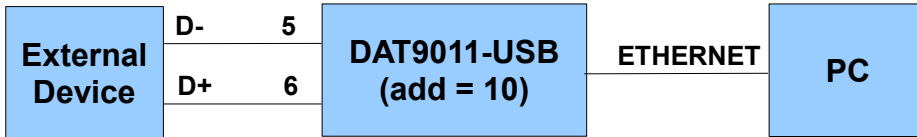


DAT9000 Project example: Logging external modbus device with DAT9011-USB

STEP 1 – Checking configuration

Connect the device as following:



NOTE: Addresses may be different

In Dev9K, follow this procedure:

- Tools → Search
Search for DAT9011-USB, then right-click on it and select “Set as Controller”
Check for Communication OK
- Tools → Config
Set Address = 10 and Type = DAT9011-USB, then click on “Update”
In the “COM” tab, check for master baud-rate = 9600

STEP 2 – Creating Application Project

Main project

Click on New Project and insert the following function blocks:

Function Block 1)

“Read Input” function to read the register %R10 of PLC, and store the value in the internal register %R40.

Delay = delay between polls (200)

Label = “Start”

Address = modbus node of PLC (1)

Register = register to read (10)

Number = number of registers to read (1)

Dest = DAT9011 internal register destination (40)

Function Block 2)

Loopback flow to Start

Block = “Start”

Variables setting

Set the variables to use in the Log record.

Variable for Date time

ID = 0

Label = “Date”

Type = Date

CSV Header = “Date”

Variable for Hour time

ID = 1

Label = “Time”

Type = Time

CSV Header = “Time”

Variable for Input value

ID = 2

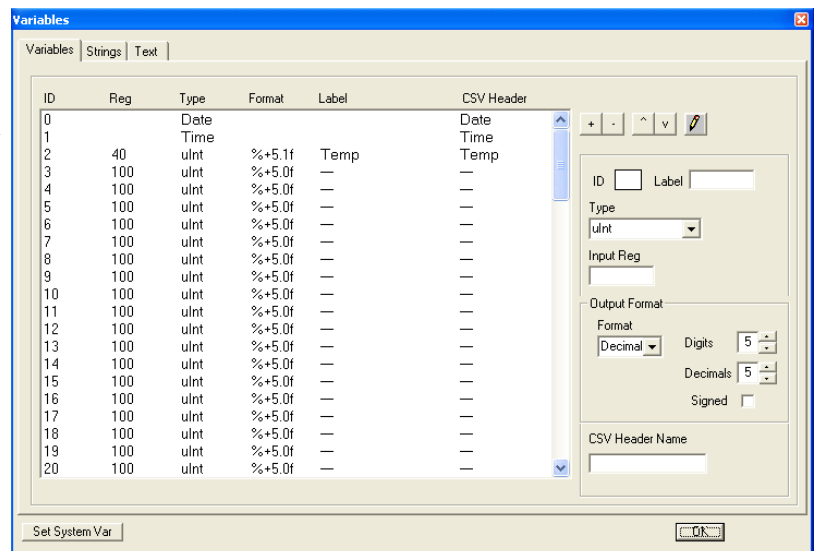
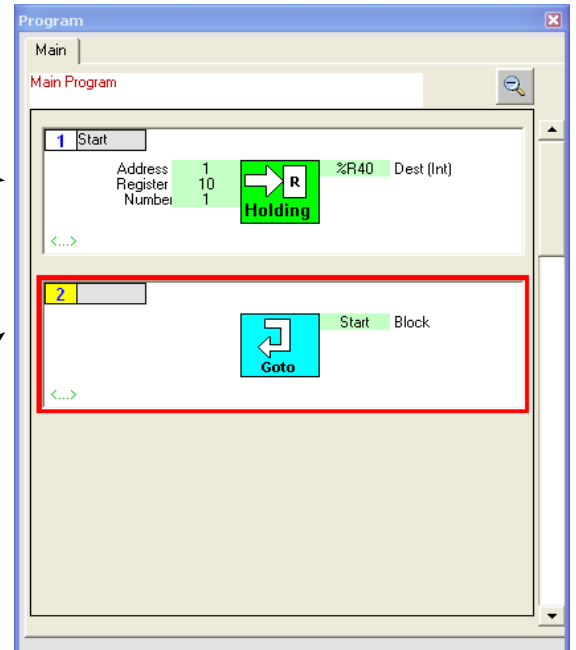
Label = “Temp”

Type = Int

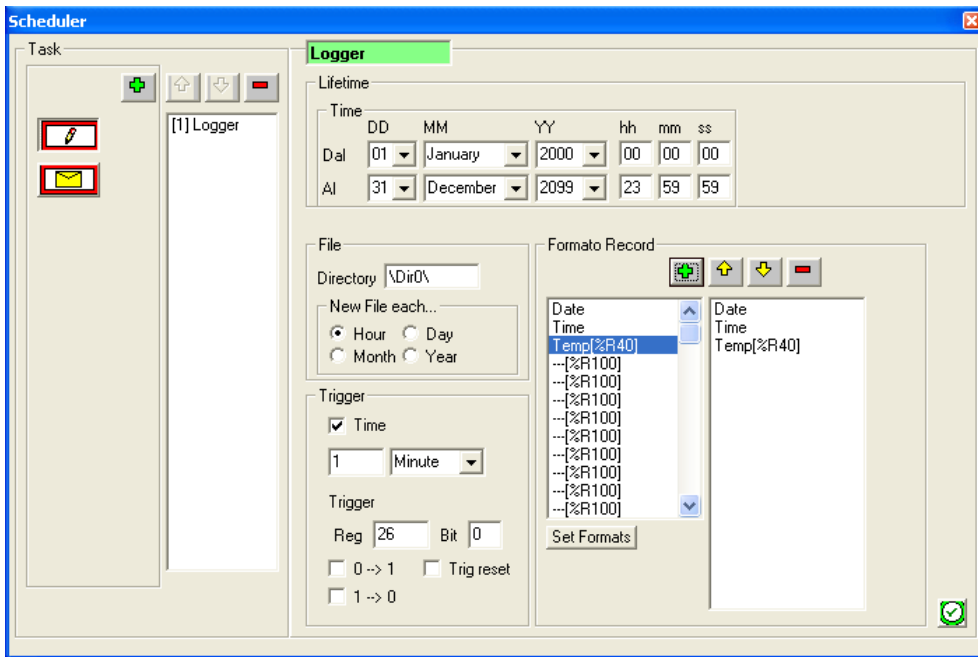
Input Reg = 40

Format = “Decimal”, 5 digits, 1 decimals

CSV Header = “Temp”



Logger setting



Example of CSV file:

Date	Time	Temp
10/07/13	09.17.05 m.	25,1
10/07/13	09.17.10 m.	26,1
10/07/13	09.17.15 m.	27,1
10/07/13	09.17.20 m.	28,1
10/07/13	09.17.25 m.	29,1
10/07/13	09.17.30 m.	30,1
10/07/13	09.18.35 m.	31,1
10/07/13	09.18.40 m.	32,1
10/07/13	09.18.45 m.	33,1
10/07/13	09.20.50 m.	34,1
10/07/13	09.20.55 m.	35,1

Insert a Logger task and set the following parameters:

- Lifetime
 - From 01 January 2000 to 31 December 2099
- File
 - Directory = " \Dir0\ " (directory where to store the CSV file)
 - New file each = Hour (create a new file at hour)
- Trigger
 - Time = checked – 1 minute (save a record each 5 minutes)
- Record Format
 - Insert the first three variables:
 - Date
 - Time
 - Temp[%R40]

→ Save the project, reconnect the controller and set DAT9011-USB in Debug mode (click on Debug button, the STS led start blinking). Click on Download button and in the Download form click on Ok.

STEP 3 – Running application

→ Set in Release mode.

Now, the STS led will stop blinking and DAT9011-USB will log the analog input value every 1 minutes in the microSD card memory storage.