

Q.

How to do floating point calculations with integers?

To gain a result with decimal place when dividing integers, please convert the integer to float first.

A.

Please see the following Macro. D8=5 is the integer value gained from PLC.

```
2  macro_command main()
3
4  unsigned int D8
5  float float_D8, float_D8_2, temp
6
7  GetData(D8, "Mitsubishi FX3U/FX3G", D, 8, 1) // D8=5 in PLC
8
9
10 float_D8 = D8/10 // float_D8 is equal to 0.0
11 SetData(float_D8, "Local HMI", LW, 100, 1) //LW100 = 0.0
12
13
14 temp=D8
15 float_D8_2 = temp / 10 // float_D8+2 is equal to 0.5
16 SetData(float_D8_2, "Local HMI", LW, 102, 1) // LW102=0.5
17
18
19 end macro_command
```

Line 10: Since D8 is an integer, D8/10 is performed as an integer operation and the result is 0. The result is then written to a float variable, float_D8, therefore float_D8 is 0.0.

Line 15: Since temp is a float, temp/10 is performed as a float operation and the result is 0.5.