ReadMe (sample source)

USB Device Driver Installation

- To communicate with RFT sensor with USB interface, you need to configure a PC USB port as a virtual serial port.
- Unzip the following file and install the device driver:

  02_USB_Device_Driver\CDM v2.12.24 WHQL Certified(ONLY_WINDOWS)
- You can downlaod the latest divice driver from the site below.

  http://www.ftdichip.com/Drivers/VCP.htm
- If you use Linux O/S, please refer to instructions on the same site.
- You have to adjust latency of the USB port to reduce the communication latency with the sensor. Please refer to the following document:

  02_USB_Device_Driver\How to Adjust_Com Port_Latency_ver0.0.pdf
- To adjust latency on Linux O/S, please refer to the following file:

  Linux_Serial_Latency_Setting.txt

Sample Program - Windows O/S

- You can find execution files in the following directory to communicate with the sensor:

  01_Sample_Source\Windows_OS\bin
- To communicate with the F/T sensor with a serial interface (RS232/ RS422/ USB), please use the following file:

  RFT_IF_UART_SAMPLE_Revx.x.x_r.exe
- To communicate with the F/T sensor with CAN interface, please use the following file:

  RFT_IF_CAN_SAMPLE_Revx.x.x_r.exe (compatible with IXXAT products)
- To communicate with the F/T sensor with EtherCAT interface, please use the following files:

  If you have an EtherCAT adaptor of RFTEC-01, please use the following program:

  RFT_IF_ECAT_EC01_R4_SAMPLE_Revx.x.x_r.exe (SOEM open source)

  If you have an EtherCAT adaptor of RFTEC-02, please use the following program:

  RFT_IF_ECAT_EC02_SAMPLE_Revx.x.x_r.exe (SOEM open source)

  Please make sure you need to install the following file to use SOEM:

  01_Sample_Source\Windows_OS\MISC\WinPcap_for_SOEM
- If you fail to execute the files, please install the files in the following directory:

  01_Sample_Source\Windows_OS\MISC\VS2013_Redistribute_Package

- The following sample source was made in Visual Studio 2013:.

  01_Sample_Source\Windows_OS\RFT_IF_CAN_SAMPLE_Rev0.0

  01_Sample_Source\Windows_OS\RFT_IF_UART_SAMPLE_Rev1.2.0

  01_Sample_Source\Windows_OS\RFT_IF_ECAT_EC01_R4_SAMPLE_Rev0.0

- To build the sample source for CAN communication, please install the following file:

  01_Sample_Source\Windows_OS\MISC\IXXAT_CAN\vci_v3.5.2\vci_3_5_2_4072.exe

Additional Sample Source

- To communicate the F/T sensor with a serial interface on Linux O/S, please refer to the following source:

  01_Sample_Source\Linux_OS

- To communicate the F/T sensor with EtherCAT interface, please refer to the following source:

  The examples below apply only to the EtherCAT Adaptor of RFTEC-01.

  01_Sample_Source\SEOM_EtherCAT_Example\SOEM-1.3.1\test\win32\RFTEC01_R4_TEST (for Window O/S)

  01_Sample_Source\SEOM_EtherCAT_Example\SOEM-1.3.1\test\linux\RFTEC01_R4_TEST (for Linux O/S)

  The examples below apply only to the EtherCAT Adaptor of RFTEC-02.

  01_Sample_Source\SEOM_EtherCAT_Example\SOEM-1.3.1\test\win32\RFTEC02_R0 (for Window O/S)

  01_Sample_Source\SEOM_EtherCAT_Example\SOEM-1.3.1\test\linux\RFTEC02_R0 (for Linux O/S)

- To use SOEM (Simple Open EtherCAT Master), please install the following file:

  01_Sample_Source\SEOM_EtherCAT_Example\WinPcapxxx.exe

- To communicate with the F/T sensor on ROS (Robot Operating System), please refer to the following sample sources of publisher and service node:

  01_Sample_Source\ROS\RFT_SENSOR_SERIAL_ver0.0.1_20171218 (for serial communication)

  The example below applies only to the EtherCAT Adaptor of RFTEC-01.

  01_Sample_Source\ROS\RFT_SENSOR_ETHERCAT_EC01_R4_20171201 (for EtherCAT communication, SOEM open source)

  The example below applies only to the EtherCAT Adaptor of RFTEC-02.

  01_Sample_Source\ROS\ RFT_SENSOR_ETHERCAT_EC02_R0_20180226 (for EtherCAT communication, SOEM open source)