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| ReadMe (sample source) | ROBOTOUS  FORCE/TORQUE SENSOR |

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| **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)