Communication Function

More than 90% of RKC products are supplied with a communication function, all of which have various types of protocols. In this section, we will introduce you to some protocols that are used in RKC products.

RKC Standard/ANSI Protocol

- All RKC products with a communication function offer this feature. As the name shows, it is based on ANSI X3.28 sub-category 2.5 A4 or B1.
- All functions, including initial setting, are covered to simplify instrument set-up.

Ladder Communication (Z-190)
This protocol is useful to reduce the programming on the PLC by the use of a HEX code and non-procedure protocol to communicate with a PLC. This type of communication is used in the SR Mini (H-PCP with Z-190 option).

Modbus (Z-1021)

Modbus is a communication protocol based on Modbus (RTU) by Modicon. By using an integrated protocol, PLC programming can be simplified and reduced while reducing total communication time in the communication between a PLC and many other devices in the field, such as sensors and actuators. The use of RS-485 hardware is cost-effective. This protocol is often used in linking FPD for FA and PA to control devices.
Memobus (Z-1001)

This is a communication protocol used in Yaskawa PLC. This protocol is used in RKC's SR Mini systems.

Profibus
Profibus-DP protocol, specified by the Foundation of Profibus, is an open network that is designed to handle a large quantity of data at a high speed. RKC offers a COM-G communication converter that can be used with REX-F, CB, SA100/200, LE100 and the SR Mini HG System.

DeviceNet
DeviceNet, specified by ODVA, is an open network designed to handle a large quantity of data at a high speed. RKC offers COM-H communication converter that can be used with REX-F, CB, SA100/200, MA 900/901, LE100 and the SR Mini HG System.

SX bus
This communication is used to connect to SX bus used in a PLC from Fuji Electric. This field bus is designed to handle a large quantity of data at a high speed. RKC offers a special PCP for SX bus in SR Mini HG series, and TIO modules (excluding some modules) can be connected.

Glossary:
FPD: Field Process Device

ODVA: Open DeviceNet Vendors Association. ODVA is the organization that manages the DeviceNet technology and promotes the worldwide adoption of DeviceNet in industrial automation.

Profibus-DP: is used in time-critical applications between an automation system and distributed devices (remote I/O, inverter, etc). Profibus-DP is also defined as IEC61158 and EN50170