

# JMobile Communication Protocols

Updated to JMobile V2.8

| Manufacturer/<br>Organization | Protocol                      | Ethernet | Serial | CAN/other | eTOP500<br>eTOP600 | eX700<br>eXware | eSMART | JSmart | ON3 H3<br>(2) | ON3 H4 | JM PC<br>Runtime | JM ID |
|-------------------------------|-------------------------------|----------|--------|-----------|--------------------|-----------------|--------|--------|---------------|--------|------------------|-------|
| 3S                            | CODESYS V2 ETH                | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | CDSE  |
|                               | CODESYS V2 SER                |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | CDSY  |
|                               | CODESYS V3 ETH                | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | CDS3  |
| ABB                           | ABB SattCon COMLI             |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | ABSA  |
|                               | Baldor NextMove               |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | BALD  |
| Automation Direct             | Automation Direct Do-more     |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | ADDM  |
| BACnet                        | BACnet                        | •        | •      |           | •                  | •               | •      | • (1)  | •             | • (1)  | • (1)            | BACN  |
| Beckhoff                      | Beckhoff ADS                  | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | BEAD  |
| Bosch Rexroth                 | Rexroth IndraControl          | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | INDR  |
| CAN                           | CANopen HMI                   |          |        | •         | •                  | •               | • (3)  | -      | -             | -      | -                | CANH  |
| DNP3                          | DNP3 Outstation               | •        |        |           | •                  | •               | •      |        | •             | •      | •                | DNPO  |
| Emerson                       | ROC Plus                      | •        | •      |           | •                  | •               | •      |        | •             | • (1)  | •                | ROCP  |
| EXOR                          | Direct Serial                 |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | DSER  |
|                               | Direct Socket                 | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | DSCK  |
| Fatek                         | Fatek FACON SER               |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | FACO  |
|                               | Fatek FACON ETH               | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | FAET  |
| GE                            | GE Intelligent Platforms SNP  |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | GE90  |
|                               | GE Intelligent Platforms SRTP | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | GEET  |
|                               | GE SRTP                       | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | GEE2  |
| Hitachi                       | Hitachi ETH                   |          | •      |           | •                  | •               | •      | •      | •             | •      | •                | HJET  |
|                               | Hitachi SER                   |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | HISE  |
| IDEC                          | IDEC Maintenance              | •        | •      |           | •                  | •               | •      | • (1)  | •             | • (1)  | •                | IDE3  |
| J1939                         | J1939                         |          |        | •         | •                  | •               | • (3)  | -      | -             | -      | -                | J193  |
| Jetter                        | Jetter Ext ETH                | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | JEE2  |
| Keyence                       | Keyence KV                    |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | KEKV  |
| KNX                           | KNX TP/IP                     | •        |        | •         | •                  | •               | • (1)  | • (1)  | • (1)         | • (1)  | • (1)            | KNX   |
| Koyo                          | Koyo DL                       |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | KOYO  |
|                               | Koyo DL ETH                   | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | KOET  |
| Lenze                         | Lenze CANopen                 |          |        | •         | •                  | •               | •      | -      | -             | -      | -                | LENZ  |
| Mitsubishi                    | Mitsubishi FX ETH             | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | MIFE  |
|                               | Mitsubishi FX SER             |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | MIFX  |
|                               | Mitsubishi iQ/Q/L ETH         | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | MIQE  |
|                               | Mitsubishi iQ/Q/L SER         |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | MIQS  |
| Modbus                        | Modbus RTU                    |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | MRTU  |
|                               | Modbus RTU Server             |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | MODS  |
|                               | Modbus TCP                    | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | MODT  |
|                               | Modbus TCP Server             | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | MODR  |
| Nidec/Control Technique       | CT Modbus TCP ETH             | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | CCMP  |
|                               | EIA Modbus TCP                |          | •      |           | •                  | •               | •      | •      | •             | •      | •                | EIAM  |
| NMEA                          | NMEA 0183                     |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | NMEA  |
| Omron                         | Omron FINS ETH                | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | OMRE  |
|                               | Omron FINS SER                |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | OMRF  |
| OPC                           | OPC UA Client                 | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | OPCU  |
| Panasonic                     | Panasonic FP                  |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | MAF1  |
| Phoenix Contact               | ProConOS ETH                  | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | PROC  |
| PROFIBUS                      | Profibus DP                   |          |        | •         | •                  | •               | -      | -      | -             | -      | -                | PROD  |
|                               | Profibus DP S7                |          |        | •         | •                  | •               | -      | -      | -             | -      | -                | S7DP  |
| ODVA                          | Ethernet/IP CIP               | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | ETIP  |
| Rockwell                      | A-B DF1                       |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | ABDF  |
|                               | A-B DH485                     |          | •      |           | •                  | •               | •      | -      | •             | -      | -                | ABDH  |
|                               | A-B ENET                      | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | ABEN  |
| SAIA                          | SAIA S-BUS                    |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | SBUS  |
|                               | SAIA S-BUS ETH                | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | SAET  |
| Schneider                     | Uni-Telway                    |          | •      |           | •                  | •               | •      | -      | •             | -      | •                | TELU  |
| Siemens                       | Simatic S7 ETH                | •        |        |           | •                  | •               | •      | •      | •             | •      | •                | S7ET  |
|                               | Simatic S7 MPI                |          | •      |           | •                  | • (4)           | • (3)  | -      | -             | -      | -                | MPOB  |
|                               | Simatic S7 PPI                |          | •      |           | •                  | •               | •      | -      | •             | -      | -                | S7PP  |

**Notes:**

- Available
- Available on demand
- Not supported by hardware platform

- (1) IP only
- (2) H3 device models are available with either Ethernet or serial connection. Choose appropriately for the protocol in use
- (3) eSMART107 only
- (4) eX707 to eX721 only

## CODESYS V3 Communication Protocols

Updated to CODESYS V3.5.10 (Windows CE) and V3.5.10 (Linux)

| CODESYS V3.5<br>Communication Stack |                  |  |  |  | Series 500<br>Series 600 | eX700<br>eXware | eSMART | JSmart | ON3 H3<br>(2) | ON3 H4 | JM PC<br>Runtime |  |
|-------------------------------------|------------------|--|--|--|--------------------------|-----------------|--------|--------|---------------|--------|------------------|--|
| Modbus TCP                          | Master and slave |  |  |  | •                        | •               | •      | •      | •             | -      | -                |  |
| Modbus RTU                          | Master and slave |  |  |  | •                        | •               | •      | •      | •             | -      | -                |  |
| CANopen                             |                  |  |  |  | •                        | •               | • (3)  | -      | -             | -      | -                |  |
| EtherNet/IP                         |                  |  |  |  | •                        | •               | •      | •      | •             | -      | -                |  |
| PROFINET                            |                  |  |  |  | •                        | •               | •      | •      | •             | -      | -                |  |
| EtherCAT                            |                  |  |  |  | -                        | •               | • (3)  | •      | -             | -      | -                |  |
| Powerlink                           |                  |  |  |  | -                        | •               | •      | •      | -             | -      | -                |  |
| OPC UA Server (5)                   |                  |  |  |  | •                        | -               | -      | -      | •             | -      | -                |  |

**Notes:**

- (2) H3 device models are available with either Ethernet or serial connection. Choose appropriately for the protocol in use
- (3) eSMART107 only
- (5) Refers to 3S OPC UA Server as a component of CODESYS runtime. It does not refer to the JMobile OPC UA Server