

# Communication with I/O Devices

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Reliability and quality of data transfer into [D2000 system](#) is one of the most important functional features. We pay a great attention to support the communication protocols and standards. We take heed to maximum reliability and debugging of data transfers by means of communication tests in industrial applications environment.

Data acquisition from I/O devices of technological processes into [D2000 system](#) is provided via communication process [D2000 KOM](#).

The communication process supports the following standards and protocols:

- **Serial asynchronous data transfer**
  - via physical media according to the standards RS232, RS485, RS422, TTY, M-Bus, wireless transfers, telephone modems, GSM/GPRS /3G.
  - transfer types request/response, token-passing (e.g. ProfiBus standard).
- **Serial synchronous data transfer**
  - for example CAN bus, DeviceNet, HDLC and others.
- **Communication standards**
  - for example COM/DCOM OPC, OPC UA, DDE, Echelon LonTalk, DLMS.
- **PC-card**
  - for example the series Advantech Data Acquisition Card.
- **Network standards**
  - technologies TCP/IP.
- **Data exchange using shared files**

If needed, process [D2000 KOM](#) allows working in offline mode (without running Server or without connection to Server), in the [KOM Archive](#) mode and performing the acquisition and archiving of data. After automatic reconnection to Server, process [D2000 KOM](#) sends data acquired in offline mode.

### Related pages:

[Communication lines](#)  
[Communication station](#)  
[I/O Tags](#)  
[KOM Archive](#)  
[Communication protocols](#)  
[Communication utilities](#)

### Blogs

Your can read several our blogs about communications and communication protocols:

- [Communication in testing enviroments](#)
- [Communication Protocols in D2000](#)
- [There is a difference between browsing and browsing \(SK\)](#)
- [D2000 \(aims for\) IoT](#)
- [Communication - BACnet protocol \(SK\)](#)
- [Communication - BACnet protocol, part 2 \(SK\)](#)
- [Communication - BACnet protocol, part 3 \(SK\)](#)
- [Communication - DLMS/COSEM protocol](#)
- [Communication - DNP3 protocol](#)
- [Communication - Ethernet/IP protocol](#)
- [Communication - Ethernet/IP protocol in practice](#)
- [ommunication - Generic User Protocol.](#)
- [GPIO protocol is here to help](#)
- [Communication - HART, Modbus and a Parrot \(SK\)](#)
- [Communication – protocol IEC 101 \(SK\)](#)
- [Communication – protocol IEC 101, part 2 \(SK\)](#)
- [Communication – protocol IEC 101, part 3 \(SK\)](#)
- [Communication – protocol IEC 104 \(SK\)](#)
- [Communication – protocol IEC 104, part 2 \(SK\)](#)
- [Communication – M-Bus](#)
- [Communication – Modbus protocol \(SK\)](#)
- [Communication – Modbus protocol, part 2 \(SK\)](#)