

SNMP INTERFACE

The Simple Network Management Protocol (SNMP) is a network protocol used by network management systems (NMS) to centrally monitor network components (e.g. routers). The INTRON-X / INTRON-D *plus* system from INDUSTRONIC supports SNMPv2c and SNMPv3 allowing for easy integration into existing network management systems.

SNMP

Simple Network Management Protocol

- Support of SNMPv2 and SNMPv3 to connect INTRON-X / INTRON-D *plus* systems to network management systems
- INDUSTRONIC-specific MIB to manage INTRON-X / INTRON-D *plus* data
- Retrieving detailed information on the hardware used and connected terminal devices
- Retrieving states and information on configured event groups (e.g. fault message states)
- SNMP traps in case of status changes in the INTRON-X / INTRON-D *plus* system

RETRIEVING DATA WITH SNMP

Retrieving general system information such as uptime, location, and system type via MIB-2 (iso.org.dod.internet.mgmt.MIB-2)

System-specific information

- Retrieving detailed information about the equipment installed in the system
- Retrieving important configuration parameters
- Retrieving the current connection status within a network of systems

PROTOCOL PROPERTIES

SNMPv2 or SNMPv3 (configurable)

UDP over IPv4

UDP port 161 for sending and receiving SNMP requests

UDP port 162 for sending SNMP traps

MIB is based on SNMPv2-SMI

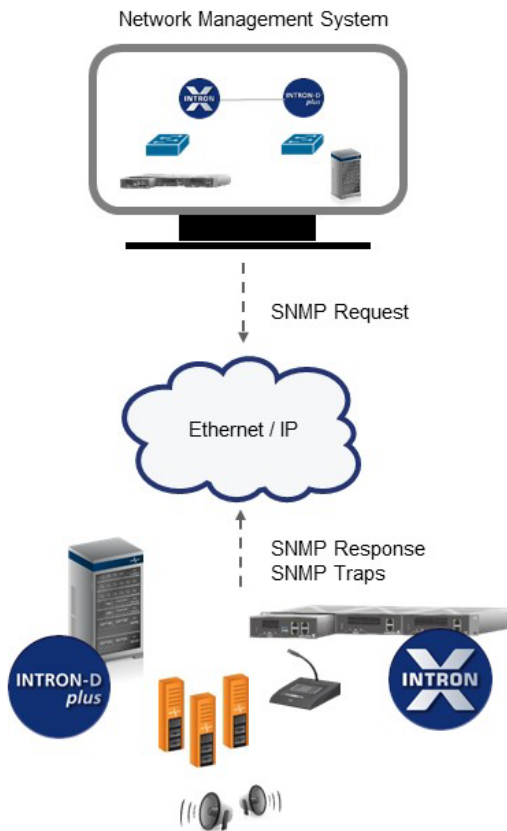
Support of UTF-8 character encoding

SUPPORTED SNMPv3 CONFIGURATION OPTIONS

| | |
|--------------------------------------|------------------------------------|
| Security levels | noAuthNoPriv, authNoPriv, authPriv |
| Digest authentication | via MD5 or SHA-1 |
| Supported encryption protocol | CBC/DES, CFB/AES-128 |
| Notification format | SNMPv3 TRAP |

Note: For authentication/privacy features an individual passphrase has to be configured. For SNMPv3 TRAPs additionally an individual engine ID has to be configured.

APPLICATION



INTERFACE

RJ45 Ethernet interface on the XCO/DXC controller

ORDER DATA

| Description | Type Number |
|--|-------------|
| ACT-SNMP Interface | 101-400-101 |
| Activation of one SNMP interface within the INTRON-X / INTRON-D <i>plus</i> system | |

In a system, each XCO/DXC controller is considered as a single SNMP network element so that each controller can separately be reached and monitored by the network management system. To protect the system configuration of the INDUSTRISTRONIC system and to support IT security measures, the SNMP interface is designed as read-only.

To retrieve system information, the MIB-2 is used in part as well as the proprietary INDUSTRISTRONIC-specific Management Information Base (MIB).

Additionally, the network management system can immediately be notified about status changes via SNMP traps. This ensures that system errors can directly be displayed. You can also configure several trap recipients so that traps can be sent to several network management systems (currently only one trap recipient configurable when using SNMPv3).

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