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Product Sheet

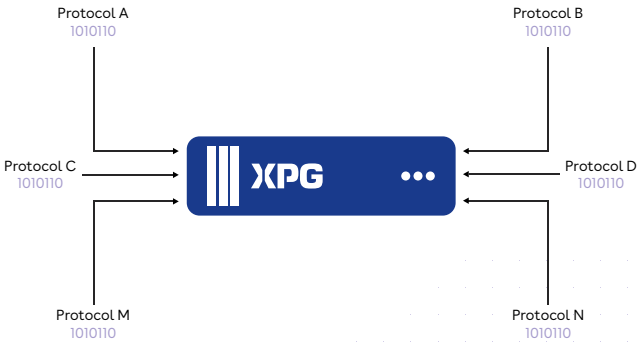
Grid Control

XPG Gateway / RTU

XPG is a modular, secure and scalable solution installed in substations and other grid infrastructures for remote control, operation and management. It collects signals, data and files, processes or converts them to exchange them with a network control centre or other centralised solutions. XPG is available in various equipment sizes or virtual machine.

Key advantages

- Easy remote control and operations
- Communications with a wide range of devices such as IEDs, SCADAs, PLCs, Fault recorders
- Secure data flows between multiple partners



Software solution

XPG consists of software solution StreamX and ISOS operating system hosted on qualified equipment or virtual machines. It is a future-proof solution and independent of hardware lifespan. StreamX is a modular software package that enables data acquisition, transmission, processing, converted between multiple protocols and stored. If required, StreamX also has a supervision module, e.g. to create a local HMI.

Here are some of its main benefits

- High performance
- Full control of infrastructure
- High cybersecurity for critical infrastructures
- Wide range of formats from hardware to virtual appliance
- Redundancy mode
- IT/OT integration

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Protocols & Standards

- IEC 61850 Client
- IEC 61850 Server
- IEC 61850 File Transfer
- IEC 60870-5-104 Client
- IEC 60870-5-104 Server
- IEC 60870-5-104 File Transfer
- IEC 60870-5-104/IEC 62351-5 Security
- *(Master/Slave)
- IEC 60870-5-101 Master
- IEC 60870-5-101 Slave
- IEC 60870-5-101 File Transfer
- IEC 60870-5-103 Master
- DNP3 TCP Client
- ICCP TASE.2 Client
- ICCP TASE.2 Server
- OPC UA Client
- OPC UA Server
- Modbus TCP Client
- Modbus TCP Server
- Modbus RTU Master (serial)
- Modbus RTU Slave (serial)
- EtherCAT Client
- Siemens S7 ISO TCP Client
- SAIA S-Bus Serial Master
- SAIA S-Bus TCP Client
- WAGO K-Bus Client
- Telegyr 065 Master
- Telegyr 8xx Master
- Telegyr 8xx Slave
- Tetraèdre TRMC Client SOAP
- MQTT Publisher/Subscriber
- REST API Client
- REST API Server

Technologies & IT Integration

- 3G/4G/5G
- HTTP(S) Server
- SSH Server
- LDAP-S Client
- Radius
- SFTP Client/Server
- SNMP Agent (v2c,v3)
- SNMP Client (v2c, v3)
- Syslog Client
- LoRaWAN® interface to NS
- VPN (OpenVPN, IPSec)
- NTP Client/Server

Configuration tools

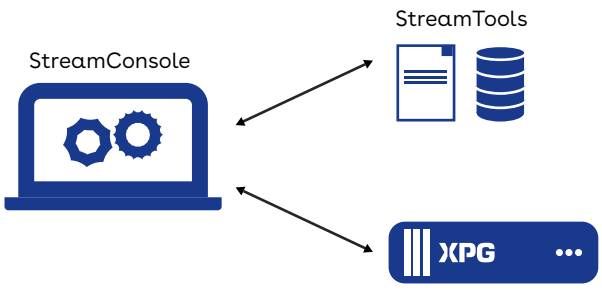
StreamTools, the configuration tool, is based on client-server concept. It hosts the configuration of the application and can be accessed from any workstation through a web browser.

- Automatic project versioning
- Easy to use and secure access
- No maintenance or backup required
- Backup of the appliance on the field
- Configuration by file import
- Point to point configuration
- Validation of configuration

Management tools

StreamConsole, the gateway management tool, allows the client to configure the gateway :

- Manage Software, OS & Interfaces
- Manage IT/OT integration
- Update configuration and firmware
- Manage log files
- Start and stop of services



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Product features

Compatible hardware	X86 hardware: Lanner ICS-P371C, MOXA DA- 681C, MOXA DA-720, MOXA DA-820C ARM hardware: CONDIS IG2 Virtual appliance: VMWare, VirtualBox, SEAPATH, KVM
Deployment	Easy initial deployment by USB key
Distribution kit	Create configuration template per-project specific for OS configuration
Software management	Remote access via graphical user interface through secure channel Remote command line interface via SSH Centralised multi-appliance management software available
User & Role	Local or LDAP/Radius directory user and group management Permission of privileged tasks
Network configuration	IP / DNS / Route / VLAN configuration Link aggregation management PRP Networking management (*Additional license)
VPN management IPSec & OpenVPN client integrated	IPSec & OpenVPN client integrated
Cellular management (*on supported models)	4G/5G Modem management Connectivity watchdog SMS handling
USB port management	Configuration of the activation / deactivation mode
Serial port management	Serial port configuration of the activation / deactivation mode
Log system	Logfile available sending events to one or more third-party syslog servers
Firewall	Integrated state-of the-art firewall with logging feature Advanced functions of the network filters guarantee a high level of security
Safe firmware update process	Several slots maintain various firmware configurations and allow reliable system update
Easy Backup / Restore	Zip archive backup file (system and firmware allows to resolve the whole equipment)
NTP Server	ISOS can act as a time server synchronised itself via IEC protocols or GPS / Cellular
SNMP	SNMP SNMPv2c and SNMPv3 (traps too)

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Hardware

Fur further information, please contact us at condis@condis.ch



IG2



DA681C



DA820C



ICS P-371



Virtual Machine

ISOS

Industrial Secure Opening System (ISOS) is a Linux-based OS built by our security experts embedding minimal number packages to make it top secure, robust, fast, with a small footprint. ISOS is designed specifically to run StreamX modules. Different types of hardware, x86 or ARM, and virtual machines are currently ISOS certified to offer scalability according to application and the volume of data to be processed.

Here are some of its main benefits

- Hardware and system management
- Reliable system updates over the network
- Comprehensive backup and restore solution
- Cyber security is the heart of the design
- Seamless integration with any IT environment
- Compatibility with X86 architecture, 32bit and 64bit, as well as ARM