

# Powerlink Telemetry Server software

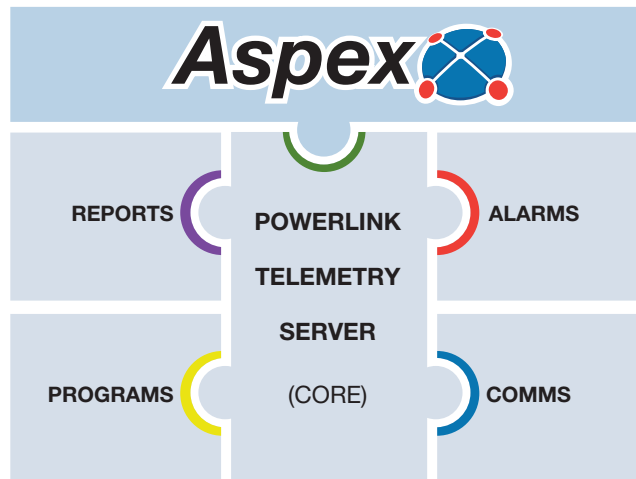
Whether it's a pump station or substation, Powerlink is highly flexible SCADA software designed specifically for telemetry applications. Operators can use Aspex™ HMI or a graphical package from other suppliers. Alarms, Paging and Reporting provide a fully featured system designed specifically for the Utilities industry [power, water and wastewater].

## REPORTS

- Flexible report creation by I/O, RTU, Alarm Action
- Report scheduler for automated operation
- Formatted reports print directly to printer
- Report output as CSV or SQL format
- RTU datalogged file reporting

## PROGRAMS

- Create programs online in realtime
- Run programs at the SCADA Master or RTUs
- Programming language uses simple English statements
- Self-documenting programming language
- Logic for simple programs allows operation autonomous of the SCADA Master
- Specific to telemetry instructions
- Combine telemetry and data management instructions in programs
- Full comparison and action operators (incl bit-wise)



## CORE

- I/O Database & configuration
- Communications channel configuration
- Input conditioning & filtering
- Status, Measurements, Control Outputs, Analog Outputs, Pulse counts & rates
- Interface with Aspex HMI or other HMI with OPC Server
- Data retrieved from remote sites is stored in a readily accessible 13 month file. Older data is archived for later reference
- Data output to SQL Database (option)
- Log File records system actions, e.g. changes to setpoints, for Audit purposes
- Secure password-protected operations and changes

## ALARMS

- Alarm on exceeding a set point limit or change of state at the remote
- 40 custom Alarm Actions
- Create a custom Alarm hierarchy
- Inbuilt paging s/w with multiple groups
- TXT alarms to cellphones
- GSM/CDMA modem support for alarm acknowledgment from cellphones
- WebAlarm website to view site status & analogs
- Working hours Alarm Management

## COMMUNICATIONS

- Connect to PLCs & RTUs from different manufacturers; Abbey Systems, Q'tech Datran, Dataterm, Rockwell and those using Modbus RTU protocols
- IP, VHF, UHF, WiFi, Cellular, 2w/4w line options
- Communications Protocols; HDLC, DNP3, Modbus, Conitel 2020/2025, DNP3/IP HDLC/IP + others
- Download programs over the communications channel
- Retrieve time stamped datalogged files over the communications channel or with a laptop PC

[www.abbey.co.nz](http://www.abbey.co.nz)

## SPECIFICATIONS

- Operating system: MS WinXPP
- Single Server, Hot Standby, Multi Master architectures, Dial-In and VPN options
- Single OPC Server or Multiport OPC Server to HMI
- Optional modules: Alarms, Paging, Reporting, Datalogging, export to ODBC/SQL database
- Applications program suites:
  - Power Networks - Load Management System
  - Water Utilities - Pump Station Operations

## COMMUNICATIONS PROTOCOLS

Abbey Systems uses a number of different communications protocols in a network depending on which is most appropriate for the application.

These include; DNP3 Master, DNP3 Slave, DNP3/IP, Modbus Master, Modbus/IP, HDLC, HDLC/IP and others.

## FEATURES OF HDLC

- |                   |   |
|-------------------|---|
| Very Secure       | - There are no lost or duplicated messages  |
| Synchronous       | - Better in noisy areas as the data stream can be aligned with the modem frequencies, giving no induced harmonics |
| Packetised        | - Better error recovery   |
| Special Functions | - Parameter downloads to configure the RTU or program it remotely<br>Retrieval of datalogged files                |
| Standards         | - Conforms to ANSI T1.618   |

## DATALOGGING

- Receives, stores and manages files created at the RTU and transmitted to the Master at convenient times
- Files contain time stamped events and measurement values collected at the remote site and stored in non volatile memory
- Data from these files can be displayed in Aspex Advanced Trends \*
- Queries can be exported in CSV format to spreadsheets and other databases \*

\* requires Aspex or Programming software

## REMOTE PROGRAMMING OF RTUS

When customers use the HDLC communications protocol logic programs can be written, downloaded and debugged online and in realtime to the RTUs.

	Telemetry server	Full	Standard	Lite	Superlite	Local Operator
<b>SCADA Software</b>						
<b>Aspex</b>	n	y	y	y	y	y
Advanced Trends	n	y	y	y	y	y
Edit HMI screens	n	y	y	y	y	y
<b>Powerlink Telemetry Server</b>	y	y	y	y	y	y
Alarms	y	y	y	y	y	y
I/O setup	y	y	y	y	y	y
Comms	y	y	y	y	y	n
Alarm system	y	y	y	y	y	y
# RTUs	100	100	100	25	5	1
Max # of RTUs	400	400	200	25	5	1
OPC Server interface to other SCADA s/w	y	n	n	n	n	-
Programs	250	500	250	100	25	100
Reports	n	y	y	y	y	-
- Scheduler	n	y	y	y	y	-
Paging	n	y	y	y	y	-
HDLC Communications Protocol (ASL products)	y	y	y	y	y	y
Software Support Contract updates	y	y	y	y	y	y
<b>Optional Software Modules</b>						
Aspex software	y	-	-	-	-	-
Reports	y	-	-	-	-	-
Paging (required for SMS Alarm/Ack fn)	y	-	-	-	-	-
Multiport OPC Server licences	y	y	y	n	n	-
SMS Alarm/Acks modem and software	y	y	y	y	y	-
WebAlarm	y	y	y	y	y	-
Datalogging	y	y	y	y	y	n
Extra RTU numbers	y	y	y	y	y	-
Extra Aspex Dial In or LAN licences	n	y	y	y	y	-
SQL/ODBC export software module	y	y	y	y	n	-
Extra programs	y	y	y	y	n	y
DNP3 Master, Modbus Master comms protocol	y	y	y	y	n	n
RTU Protocol Drivers, DNP3, Modbus, DF-1, Datran	y	y	y	y	y	n
Serial Protocols at the RTU; DNP3, Modbus, DF-1	y	y	y	y	y	n
Hot Standby PC c/o hardware and software	y	y	y	y	y	n
Multi Master	y	y	y	n	n	n
Load Management System - Suite of programs	y	y	n	n	n	n
Pump Station Operations - Suite of programs	y	y	y	y	y	y

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