



Part Number: SXIPM-DNP3-1 - DNP Slave Driver

SIXNET offers a versatile and highly configurable DNP slave driver for IPm-based Controllers and RTUs for use in modern or legacy systems. It is fully compliant with DNP v3.00 Subset Definition Level 2 and contains many Subset Level 3 features plus some functionality beyond Subset Level 3. DNP (Distributed Network Protocol) is an open and public protocol maintained by the DNP User group (www.dnp.org). It was developed to achieve open, standards-based interoperability between substation computers, RTUs, IEDs (Intelligent Electronic Devices) and master stations for the electric utility industry.

The SIXNET IPm DNP slave driver enables data exchange with all types of I/O within IPm-based units and allows the maximum advantage of the powerful IPm features while providing full compliance with DNP standards. The SIXNET IPm DNP driver is highly configurable with a Windows utility that is fully integrated into the SIXNET I/O Tool Kit. Get more information.

The DNP v3.00 driver for IPm Controllers and RTUs implements a SLAVE device function. This implementation is fully compliant with DNP V3.00 Subset Definition Level 2 and contains many Subset Level 3 features and some functionality beyond Subset Level 3.

The DNP v3.00 slave driver for SIXNET IPm family of open Controllers and RTUs has been designed to enable data exchange with all types of I/O within the IPm units and to obtain the maximum advantage of IPm features while providing full compliance with DNP standards.

The SIXNET IPm DNP v3.00 slave is highly configurable. It includes a Windows configuration utility which integrates into the SIXNET I/O Tool Kit.

In order to ensure interoperability, extensions beyond Subset level 2 are disabled by default. Such extensions can be enabled by the means of the configuration utility.

SIXNET IPm DNP Features and Capabilities:

- Flexible and easy-to-use configuration tool fully integrated with SXTOOL kit.
 - I/O to DNP objects mapping for any I/O type
 - Event generation and attributes (Class) for every mapped DNP Object
 - Run time DNP protocol behavior at all DNP protocol layers (Physical, Link, Application)
- Powerful and efficient slave driver
 - DNP over serial port with collision avoidance (RS-232, RS-485, radio, dial-in and dial-out modem)
 - DNP over LAN/WAN (UDP, TCP server and client)
 - Link Layer confirmations and retries (configurable)
 - Application Layer confirmations and retries (configurable)
 - Unsolicited message generation for event reporting (configurable)
 - Time synchronization (configurable)
 - Full SIXNET I/O to DNP object mapping
 - Event generation (min scan time 20 ms) and time-stamping at 1ms resolution
 - All Level 2 Static objects (Binary Inputs/Outputs, Analog Input/Output, Binary Counters, Time and Frozen objects)
 - All Level 2 Event objects and more (configurable) (Binary Input Change, Counter Change, Analog Input Change, Frozen Counter Change and Frozen Analog Input Change)
 - "Safe Mode" Level 2 operating mode (extensions can be enabled with the configuration tool)
 - Full run time debugging and message output tracing to a terminal, remote telnet session or file, for diagnostics and trouble-shooting purposes
 - UDP event queue server and client API: External programs or special hi-speed I/O can annotate events in the event queue
- Complete documentation including
 - Step-by-step tutorial
 - Comprehensive on-line help system
 - Context sensitive tool tips
 - Complete DNP3 User Manual with DNP Device Profile Document