A Sierra Monitor Company

# FieldServer Driver - Serial
## FS-8700-75
## GE-SNPx
## Protocol Serial Driver

**Driver Code:** **SNPx**
**Version:** **1.00a**
**Protocol Version:** **N/A**
**Document Rev:** **1**
**Devices Supported:** GE 90-70, 90-30 PLC's and other SNP compliant devices

| Device | Tested |
|---|---|
| | Protocol has been tested against a Series 90-30 CPU 364<br><br>Protocol has been tested against an Intellution FIX32's SNP device driver. |

**Interface:** RS232 or RS-485 (Half-Duplex)
**Baud Rates:** Std Baud Rates up to 19200 (GE PLC limitation)
**Data Bits:** 7,8
**Stop Bits:** 1,2
**Parity:** Odd, Even, None
**Handshaking:** None

- THE SNP-X protocol provides fast data transfer using a simple protocol with a limited set of services. The service set is much smaller than standard SNP but the data throughput is significantly higher as the message transactions are simpler and there is less overhead per message. It is a half-duplex master-slave protocol that can be used in point-to-point or multidrop applications. Only one master is permitted per network. Almost every device made by GE that supports SNP also supports SNP-X.
- GE refer to the protocol as 'SNP-X'. FieldServer often refer to the protocol as SNPx.
- The SNPx driver is capable of acting as a client or server.
- Broadcasting is not supported.
- The SNPx driver can read and write system memory.
- The FieldServer's serial and/or RS485 ports may be used to communicate with the SNP device.
- The SNP driver can expose its communication statistics so that they can be monitored by a downstream device.

- The following data types may be read.

| | | |
|---|---|---|
| Discrete Inputs (%I) | Genius Global Data (%G) | %SA Discrete |
| Discrete Outputs (%Q) | Analog Inputs (%AI) | %SB Discrete |
| Discrete Temporaries (%T) | Analog Outputs (%AQ) | %SC Discrete |
| Discrete Internals (%M) | Registers (%R) | |
| %S Discrete (%S) | | |

- The maximum amount of data that can be read / written in one transaction must fit in 1000 data bytes.