

Appendix B

DNP3 DATA OBJECT LIBRARY

Table 5.8 binary input object

Group	Var	Type	Description
01	01	Static	Binary Input (single-bit)
	02	Static	Binary Input with Status
02	01	Event	Binary input change without time
	02	Event	Binary input change with time
	03	Event	binary Input Change with Relative Time

Table 5.9 BINARY OUTPUT OBJECT:

Group	Var	Type	Description
10	01	Static	Binary Output
	02	Static	Binary Output Status
12	01	Static	Control Relay Output Block
	02	Static	Pattern Control Block
	03	Static	Pattern Mask

Table 5.10counter object

Static counters			
Group	Var	Type	Description
20	01	static	32-Bit Binary Counter
	02	static	16-Bit Binary Counter
	03	static	32-Bit Delta Counter
	04	static	16-Bit Delta Counter
	05	static	32-Bit Binary Counter without flag
	06	static	16-Bit Binary Counter without flag
	07	static	32-Bit Delta Counter without flag
	08	static	16-Bit Delta Counter without flag

Table 5.11 frozen static counters

Frozen static group			
Group	Var	Type	Description
21	01	Frozen static	32-Bit Frozen Counter
	02	Frozen static	16-Bit Frozen Counter
	03	Frozen static	32-Bit Frozen Delta Counter
	04	Frozen static	16-Bit Frozen Delta Counter
	05	Frozen static	32-Bit Frozen Counter with Time Freeze
	06	Frozen static	16-Bit Frozen Counter with Time Freeze
	07	Frozen static	32-Bit Frozen Delta Counter with Time Freeze
	08	Frozen static	16-Bit Frozen Delta Counter with Time Freeze
	09	Frozen static	32-Bit Frozen Counter without flag

	10	Frozen static	16-Bit Frozen Counter without flag
	11	Frozen static	32-Bit Frozen Delta Counter without flag
	12	Frozen static	16-Bit Frozen Delta Counter without flag

Table 5.12 FROZEN EVENT

Frozen events			
Group	Var	Type	Description
23	01	Frozen event	32 bit frozen counter event without time
	02	Frozen event	16 bit frozen counter event without time
	03	Frozen event	32 bit frozen delta counter event without time
	04	Frozen event	16 bit frozen delta counter event without time
	05	Frozen event	32 bit frozen counter event with time
	06	Frozen event	16 bit frozen counter event with time freeze
	07	Frozen event	32 bit frozen delta counter event with time freeze
	08	Frozen event	16 bit frozen delta counter event without time freeze

Table 5.13 analog input objects

Group	Var	Type	Description
30	01	Static	32 bit analog input
	02	Static	16 bit analog input
	03	Static	32 bit analog input without flag
	04	Static	16 bit analog input without flag
	05	Static	Short floating point analog input
	06	Static	long floating point analog input
31	01	Frozen static	32 bit frozen analog input
	02	Frozen static	16 bit frozen analog input
	03	Frozen static	32 bit frozen analog input with time freeze
	04	Frozen static	16 bit frozen analog input with time freeze
	05	Frozen static	32 bit frozen analog input without flag
	06	Frozen static	16 bit frozen analog input without flag
	07	Frozen static	Short floating point frozen analog input
	08	Frozen static	long floating point frozen analog input
32	01	Event	32 bit analog change event without time
	02	Event	16 bit analog change event without time
	03	Event	32 bit analog change event with time
	04	Event	16 bit analog change event with time

	05	Event	Short floating point analog change event
	06	Event	long floating point analog change event
	07	Event	Short floating point analog change event with time.
	08	Event	long floating point analog change event with time
33	01	Frozen event	32 bit frozen analog event without time
	02	Frozen event	16 bit frozen analog event without time
	03	Frozen event	32 bit frozen analog event with time
	04	Frozen event	16 bit frozen analog event with time
	05	Frozen event	Short floating point frozen analog event
	06	Frozen event	long floating point frozen analog event
	07	Frozen event	Short floating point frozen analog event with time
	08	Frozen event	long floating point frozen analog event with time
34	01	Static*	16bit analog input reporting dead band object
	02	Static*	32bit analog input reporting dead band object
	03	Event	

Table 4.14 analog output object

Analog out put objects			
Group	Var	Type	Description
40	01	Static	32 bit analog output status
	02	Static	16 bit analog output status
	03	Static	Short floating point analog output status
	04	Static	long floating point analog output status
41	01	Static	32 bit analog output block
	02	Static	16 bit analog output block
	03	Static	Short floating point analog output block
	04	Static	long floating point analog output block

Table 4.15time object

Time objects			
Group	Var	Type	Description
50	01	Not used	Time and date
	02		Time and date with interval
51	01		Time and date CTO
	02		Unsynchronized time and date CTO
52	01		Time delay coarse
	02		Time delay fine

Table 5.16 class object

Class objects			
Group	Var	type	Description
60	01	Not used	Class 0 DATA
	02		Class 1 DATA
	03		Class 2 DATA
	04		Class 3 DATA

Table 5.17file object/device object

31	VEN 4 bytes ASCII vendor code	0
15	VEN Object identifier	0
15	LEN Data object length	0
DATA OBJECT Vender information		