DNP 3 setting parameters for all VAMP relays

This application note applies to Vamp 50, Vamp 200 and Vamp 300 series
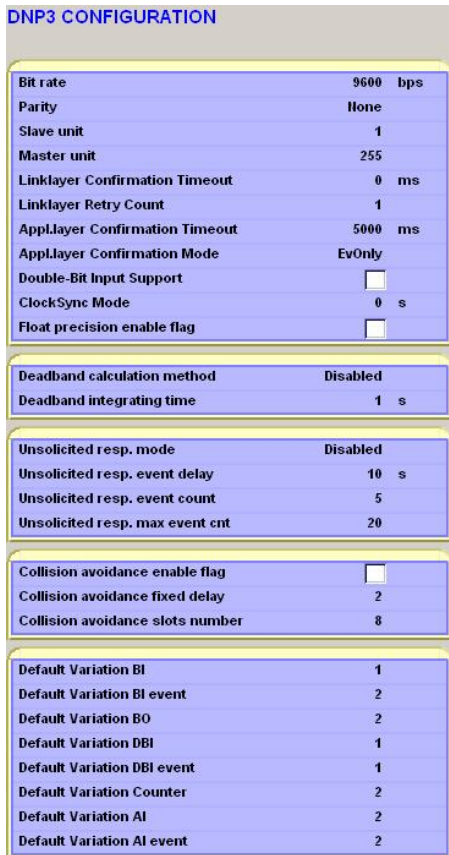

Figure 1. VAMPSET DNP3 configuration

Parameter	Unit	Range	Description
Bit rate	bps	4800..38400	Serial bit rate setting
Parity	-	None/Even/Odd	Parity setting
Slave Unit	-	1..65519	Unit address for DNP3 slave
Master Unit	-	1..65519	Unit address for DNP3 master
Linklayer : - Confirmation timeout	ms	0	Link layer confirmation disabled
		1..65535	Timeout for link layer confirmation.
- Retry count	-	1..255	Link layer retries if Link layer confirmation is enabled.
Appl.layer : - Confirmation timeout	ms	0..65535	Timeout for application layer confirmation
- Confirmation mode	-	EvOnly	Confirmation requested for application layer messages containing event information only
		All	Confirmation requested for all application layer messages
Double-bit Input support	-	Enable/Disable	If double-bit inputs are not supported by master

			they can be disabled.
ClockSync Mode	s	0	Clock sync is requested only at startup
		1..64000	interval for clock sync request

Parameter	Unit	Range	Description
Float precision enable flag	-	Disable	Integer variation carries values with same precision as float variation (i.e. voltage 230.4V ; integer->2304 & float->2304.0)
		Enable	Float variation has bigger precision than integer variation (i.e. voltage 230.4V; integer->230 & float->230.4)
Deadband for analog input events: - calculation method	-	Disabled	No deadband, no AI events generated
		Fixed	Event is generated when AI value change exceeds given deadband.
		Integrated	Integrating deadband used
- integrating time	s	1..200	Integrating time setting used when Deadband calculation method is Integrated.
Unsolicited resp. : - mode	-	Disabled	Unsolicited responses not in use
		+Empty&Ena	Unsolicited response enabled, empty UR sent first, waiting for Enable UR from master
		+Empty	Unsolicited response enabled, empty UR sent first, not waiting for master Enable UR before proceeding.
		Enabled	Unsolicited response enabled, starts sending UR's right away
- event delay	s	0..200	UR is delayed this amount of seconds from first event.
- event count	-	1..10	UR is delayed until this amount of events is available. Used together with previous parameter.
- max event count	-	1..100	Maximum amount of events in one UR.
Collision avoidance: - enable flag	-	Enable/Disable	Collision avoidance on/off
- fixed delay	s	1..200	If the line is busy, this amount of bus access tries is always kept silent.
- slots number	-	1..255	Amount of bus access slots available for random bus access. If the line was busy the slave waits for: fixed delay + random (slots), after the bus becomes idle before accessing the bus.

Parameter	Unit	Range	Description
Default Variation:			
- BI	-	1..2	1 = Single-bit packed 2 = Single-bit with flag
- BI event	-	1..2	1 = Without time 2 = With absolute time
- BO	-	2..2	2 = Binary output status
- DBI	-	1..2	1 = without flag 2 = with flag
- DBI event	-	1..2	1 = Without time 2 = With absolute time
- Counter	-	1..6	1 = 32-bit with flag 2 = 16-bit with flag 3 = Not supported 4 = Not supported 5 = 32-bit without flag 6 = 16-bit without flag
- AI	-	1..5	1 = 32-bit with flag 2 = 16-bit with flag 3 = 32-bit without flag 4 = 16-bit without flag 5 = Single-precision, floating-point with flag
- AI event	-	1..5	1 = 32-bit without time 2 = 16-bit without time 3 = 32-bit with time 4 = 16-bit with time 5 = Single precision, floating-point without time

Keywords: DNP 3 setting parameters, DNP 3 configuration, DNP 3 description