

## DNP 3 setting parameters for all VAMP relays

This application note applies to Vamp 40, Vamp 50, Vamp 200 and Vamp 300 series



Figure 1. VAMPSET DNP3 configuration

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

			they can be disabled.
<b>ClockSync Mode</b>	s	0 1..64000	Clock sync is requested only at startup interval for clock sync request
<b>Parameter</b>	<b>Unit</b>	<b>Range</b>	<b>Description</b>
<b>Float precision enable flag</b>	-	Disable  Enable	Integer variation carries values with same precision as float variation (i.e. voltage 230.4V ; integer->2304 & float->2304.0)  Float variation has bigger precision than integer variation (i.e. voltage 230.4V; integer->230 & float->230.4)
<b>Deadband for analog input events:</b> - calculation method  - integrating time	-  s	Disabled  Fixed  Integrated 1..200	No deadband, no AI events generated  Event is generated when AI value change exceeds given deadband.  Integrating deadband used  Integrating time setting used when Deadband calculation method is Integrated.
<b>Unsolicited resp. :</b> - mode  - event delay - event count - max event count	-  s - -	Disabled +Empty&Ena  +Empty  Enabled 0..200 1..10 1..100	Unsolicited responses not in use  Unsolicited response enabled, empty UR sent first, waiting for Enable UR from master  Unsolicited response enabled, empty UR sent first, not waiting for master Enable UR before proceeding.  Unsolicited response enabled, starts sending UR's right away  UR is delayed this amount of seconds from first event.  UR is delayed until this amount of events is available. Used together with previous parameter.  Maximum amount of events in one UR.
<b>Collision avoidance:</b> - enable flag - fixed delay - slots number	- s -	Enable/Disable 1..200 1..255	Collision avoidance on/off  If the line is busy, this amount of bus access tries is always kept silent.  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
<b>Default Variation:</b>			
- 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

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