DN-DP PROFIBUS® DP / DeviceNet[™] Gateway



Fast and Reliable Linking PROFIBUS DP and DeviceNet with Data Buffering

- DeviceNet-PLC link, e.g. to SIEMENS S7-1500, S7-1200, S7-400, S7-300
- DeviceNet slave device with up to 240 user data bytes per direction, but limited to a total of 312 user data bytes if using both directions
- Up to 40 DeviceNet slave devices can be addressed
- Operation as DeviceNet scanner or slave

Approved Reliability and Ease of Use

- PROFIBUS DP and DeviceNet interfaces are electrically isolated
- DIN-EN rail mountable housing (TS 35)

Configuration via the Configuration Tool of the PROFIBUS DP Master

Linking DP and DeviceNet

The DN-DP module can link any PROFIBUS DP master to a DeviceNet network. The DN-DP gateway operates as a PROFIBUS DP slave-I/O component.

At the DeviceNet network the DN-DP gateway can operate as a scanner to control several DeviceNet slave devices or as a



single slave device to be connected to one DeviceNet scanner.

The DN-DP module is always configured via a PROFIBUS DP master.

Configuration of the DN-DP Gateway as a DeviceNet Scanner

As a DeviceNet scanner, several DeviceNet slave devices can be addressed. The maximum number is between 20 and 40. This number depends on the configured PROFIBUS DP slave I/O type of each DeviceNet slave device. Up to a total of 312 user data bytes can be configured for each DeviceNet slave device. For each direction up to 240 user data bytes can be set up.

Configuration of the DN-DP Gateway as a Single DeviceNet Slave

The DN-DP gateway can be configured as exactly one DeviceNet slave.

With this configuration, it can be connected to exactly one DeviceNet scanner.

Applications

With the DN-DP gateway you can couple DeviceNet modules to e.g. a SIMATIC-S7.

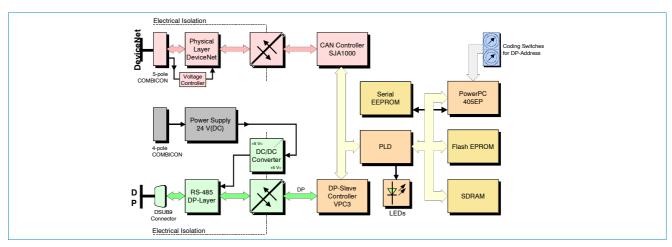
Physical Interfaces

The DN-DP supports all DeviceNet compatible bit rates. The PROFIBUS DP Slave interface automatically recognizes all usual bit rates up to 12 Mbit/s.

The PROFIBUS DP as well as the DeviceNet interface are electrically isolated.

Configuration

The module can be configured via PROFIBUS configuration tool, e.g. the PLC SIMATIC Manager or the TIA Portal.



Technical Specifications:

	General:				
	General:				
PowerPC™ 405 EP, 133 MHz	Ambient temperature 0 °C +50 °C				
Memory 4 M x 32 bit SDRAM (16 MB), 512 k x 16 bit Flash EPROM (1 MB)	Relative ł	numidity	Max. 90 % (non-condensing)		
	Power su	pply	24 VDC, I _{24VTYPICAL} = 140 mA, I _{24VMAX} = 150 mA		
	Connectors		DeviceNet:	5-pin socket connecto	r
SJA1000, ISO11898-1 (CAN 2.0)			DP: Power:	DSUB9 female	
DeviceNet According to DeviceNet Specification release 2.0, interface differential, electrically isolated, all DeviceNet bit rates are supported				4-pin spring-cage coni plug	nection
	Order Information:				
	Hardware	Hardware			Order No.
VPC3, DP-Slave	DN-DP Gatew		eway DeviceNet / PROFIBUS DP-Slave,		C.2930.02
RS-485, electrically isolated, max. 12 Mbit/s		ISO11898	}-2, GSD-file		
	512 k x 16 bit Flash ÈPROM (1 MB) SJA1000, ISO11898-1 (CAN 2.0) According to DeviceNet Specification release 2.0, differential, electrically isolated, all DeviceNet bit rates are supported	512 k x 16 bit Flash ÈPROM (1 MB) Power su, 512 k x 16 bit Flash ÈPROM (1 MB) Power su, SJA1000, ISO11898-1 (CAN 2.0) Connecto According to DeviceNet Specification release 2.0, differential, electrically isolated, all DeviceNet bit rates are supported Order Int Hardware VPC3, DP-Slave	512 k x 16 bit Flash ÈPROM (1 MB) Power supply 512 k x 16 bit Flash ÈPROM (1 MB) Power supply SJA1000, ISO11898-1 (CAN 2.0) Connectors According to DeviceNet Specification release 2.0, differential, electrically isolated, all DeviceNet bit rates are supported Order Information: Hardware DN-DP Gateway VPC3, DP-Slave DN-DP Gateway	512 k x 16 bit Flash ÈPROM (1 MB) Power supply 24 VDC, I ₂₄ SJA1000, ISO11898-1 (CAN 2.0) Connectors DeviceNet: According to DeviceNet Specification release 2.0, differential, electrically isolated, all DeviceNet bit rates are supported Order Information: VPC3, DP-Slave DN-DP Gateway DeviceNet / /	512 k x 16 bit Flash ÈPROM (1 MB) Power supply 24 VDC, I _{24VTYPICAL} = 140 mA, I _{24VMA} SJA1000, ISO11898-1 (CAN 2.0) Connectors DeviceNet: 5-pin socket connector According to DeviceNet Specification release 2.0, differential, electrically isolated, all DeviceNet bit rates are supported DreviceNet bit rates are supported VPC3, DP-Slave Order Information:

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