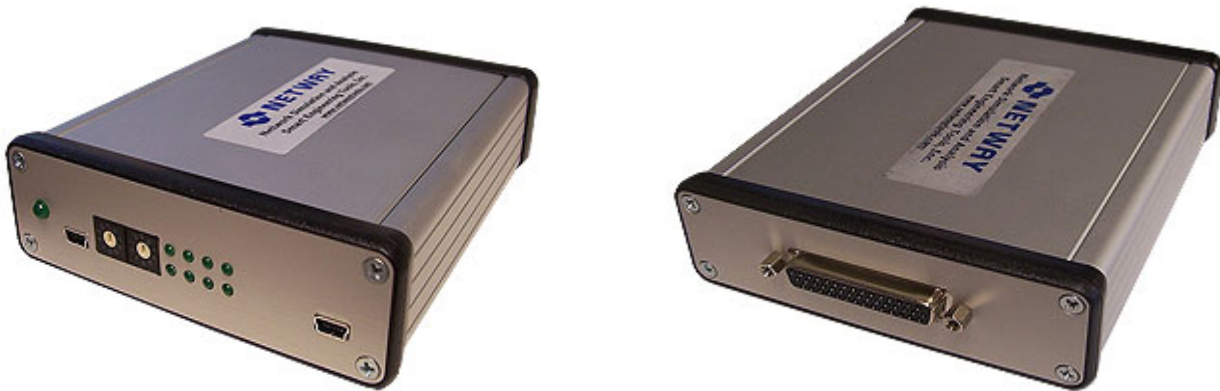# NETWAY 80 Flexray Data Sheet

Stand-alone real-time multiplex simulation and analysis tool

FEATURE	NETWAY 80 FLEXRAY
Analog / Digital Inputs	12 (0-15V) plus 8 (0-5V), 12 bits resolution.
Digital Outputs	12 open drain, max 50V, 350mA
PWM Inputs / Outputs	12 PWM Inputs / 12 PWM Outputs
Analog outputs	8 (0-5V), 8-bits resolution.
LED and Switches	8 control LEDs and two 0-9 decimal switches for mode control
Flexray channels A/B	TI TMS 570 based Flexray implementation
(*)CAN channels	Maximum 4 CAN channels, selectable transceivers HS, FT, SW
(*)UART channels	Maximum 4 UART channels, transceivers K-Line, RS485, RS232
(*)SPI/I2C channels	Two SPI/IIC channels for custom protocols
PC Interface	Mini USB (switchable to serial for firmware updates)
Network Connector	44-pin HDB connector for power, networks, and I/O signals
Dimensions	5.25" x 4.25" x 1.25" (aluminum enclosure)
Application compatibility	Windows XP and later (32 or 64 bit OS)
Control Library	nwCtrl.dll – MS Studio 6, LabWindows, LabView (32 or 64 bit OS) nwCtrlCOM.dll – MS Studio 8, MS Studio 10 (32 or 64 bit OS)
Product ID	NW80FRAY
Note 1: Items designated with (*) are optional, specified by a customer	
Note 2: Abbreviations: **HS** – high-speed CAN transceiver up to 1 Mbits /sec, **FT** – fault-tolerant CAN transceiver 83.3 Kbits/sec, **SW** – single-wire CAN (GMLAN) – 33.3 Kbits/sec	
Note 3: Control Library (nwCtrl.dll and nwCtrlCOM.dll) license must be purchased separately. The department license comes with a library manual and demo examples	

Tool Features:

- **FlexRay**: Channels A/B
- **CAN**: 4 independent CAN channels
  - Selection of transceivers per channel: High-Speed Dual-Wire / Fault-Tolerance / Single-Wire(GMLAN)
  - Standard 11-bit and extended 29-bit header
  - Supports multi-frame CAN (ISO-15765)
  - Supports J2534 with SET32.DLL library
  - J1939, J1979, and more
- **UART**: 4 independent channels: UART protocols - LIN 2.1(1.3), KWP2000, KWP1281, ISO9141-1, ISO9141-2, J1708, J1587, SAEJ1922, etc. Selection of transceivers per channel: LIN (K-Line), RS485, RS232, AOS. Block transfer support.
- **J1850**: two independent channels VPW (Class2) and PWM (SCP). Block transfer support.
- **IIC**: one channel up to 400 Kbits/sec, Master or Slave configuration
- **SPI**: one channel up to 20 Mbits/sec, Master or Slave configuration
- **I/O Outputs** are open drain, pull-up maximum to 50V, load maximum 350mA.
- **I/O Input** signals range 0~15V and 0~5V, 12 bits resolution.
- **Emulation** script language for real-time networks and signals simulation, worst-case resolution less than 1ms for all operations including data logging, network simulations, and I/O signal measurement and generation.
- **Events** triggered by network messages, timers, or/and I/O signal transitions
- **Stand-alone** operations including in-vehicle gateway, end-of-line test, on bench rest of vehicle simulator, data logging, etc. Sleep mode current consumption is less than 1mA.
- Log data is preserved by the backup battery when power is switched OFF. Capable of logging up to 32,000 messages. Flexible dynamic filtering for data logging.
- When connected to PC unlimited logging and analysis with a variety of graphical network signals representation is available. Traffic replay and more.
- **Warranty** and technical support (free software/firmware upgrades) for one full year from the purchase date.