



DLS.Pro

Multifunction tool for ECU programming and diagnostics on CAN, LIN and K-line buses



DLS.Pro is the compact solution for ECU communication, OBD-II compliant. **DLS.Pro** is the “one-box” solution: a portable instrument with USB connection to the PC and all the interfaces for ECU diagnostic, reprogramming either on board or in laboratory.

MAIN FEATURES:

- ⊙ External power supply 220Vac- 12Vdc
- ⊙ Car lighter for in vehicle operations
- ⊙ ECU supply with 2 signals for +30 (battery) and +15 (key)
- ⊙ CAN, LIN e K-line buses integrated in one instrument
- ⊙ Programmable terminator resistor insertion (120 Ohm) for CAN bus with relays
- ⊙ Software synchronization between communication buses and power supply
- ⊙ Laboratory option with 4mm bananas
- ⊙ Suitable for OBD-II connection

TECHNICAL SPECIFICATIONS

Specification	Protocols	Interface
CAN	<ul style="list-style-type: none"> ➤ CAN 2.0A (11-bit) ➤ CAN 2.0B (29-bit) ➤ ISO 11898 (Physical layer) ➤ ISO 15765-4 (Diagnostic on CAN) ➤ ISO 14230-4 (KWP2000) ➤ ISO 14229 (UDS) ➤ ISO15031 (OBD II Protocol) ➤ ISO 11898-1 (CAN FD) 	<ul style="list-style-type: none"> ➤ National Instruments CAN Interface ➤ Kvaser CAN Interface ➤ Vector CAN Interface
LIN	LIN 1.3, 2.0, 2.1 and J2602 compliant (based on installed board)	<ul style="list-style-type: none"> ➤ National Instruments LIN Interface ➤ Vector CAN/LIN Interface
K-line	ISO 9141	➤ On board
Power	Voltage : 12 V DC	Current : 1 A max
Dimensions	WxHxD : 220 x 55 x 170 mm	

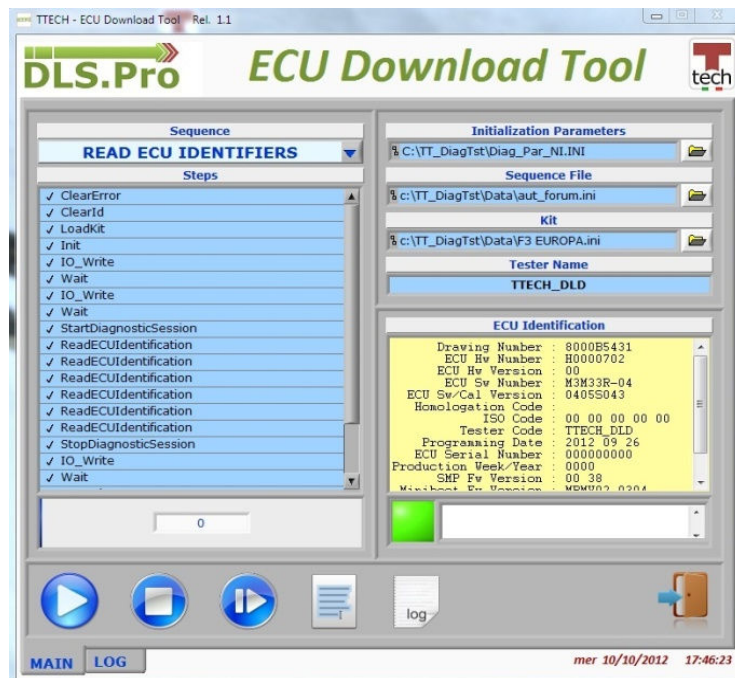


SOFTWARE FEATURES

- ⊙ Editable downloading sequences
- ⊙ Selectable complete traffic / diagnostic log
- ⊙ Step by step with pause function for debugging
- ⊙ Editable operator messages
- ⊙ Easy to configure code and data mapping for downloading

APPLICATIONS

- ⊙ Laboratory and development systems
- ⊙ Reworking stations
- ⊙ On-board diagnostic systems
- ⊙ Flashing/reprogramming campaigns tool
- ⊙ Tool for resident, off-site technician



CONFIGURATION AND OPTIONS

Product code	I/O	CAN	LIN	K-line	Interface	Description
DLS.Pro	X	X		X	CAN NI USB-8473	CAN up to 1Mbit/s Philips SJA1000 CAN controller Philips TJA1041 high-speed CAN transceiver Time stamp accuracy: 1 µs
DLS.Pro-N_LIN	X		X	X	LIN NI USB-8476	LIN up to 20 kbit/s Master/slave termination software selectable Atmel ATA6620 LIN transceiver Time stamp accuracy: 1 µs
DLS.Pro-K_CAN	X	X		X	CAN Kvaser	CAN up to 1 Mbit/s Galvanic isolation of the CAN bus driver stage Time stamp accuracy: 1 µs
DLS.Pro-K_LIN	X		X	X	LIN Kvaser	LIN up to 20 kbit/s Galvanic isolation of the LIN bus driver stage
DLS.Pro-V_CAN	X	X		X	CAN Vector	CAN up to 2 Mbit/s Time stamp accuracy: 1 µs
DLS.Pro-V_LIN	X	X	X	X	CAN/LIN Vector	LIN up to 20 kbit/s Galvanic isolation of the LIN bus driver stage
DLS.Pro-xxx-LAB	X	X	X	X	NI, Kvaser or Vector	Optional interface with banana sockets (CAN or LIN interface on customer requirements)
DLS.Pro-xxx-CSP	X	X	X	X	NI, Kvaser or Vector	Optional custom software downloading protocol