2021 Products

TXT MULTIHUB

12/2020

Simplifying the present, anticipating the future

The new TXT MULTIHUB

TXT MULTIHUB retains the features of the TXTs: multi-environment VCI, robustness and Pass Thru (J2534) and **adds 7 new ones**.

7 new features

- **Digital Display**
- **Rugged case with Corner protection**
- **IP53** grade and drop tested (MIL-STD-810G)
- **WiFi** connection in addition to BT and USB
- On-board operating system (**Linux**)
- Integrated **DoIP** protocol (ISO13400)

- RP1210 Protocol for Truck/OHW COMING SOON

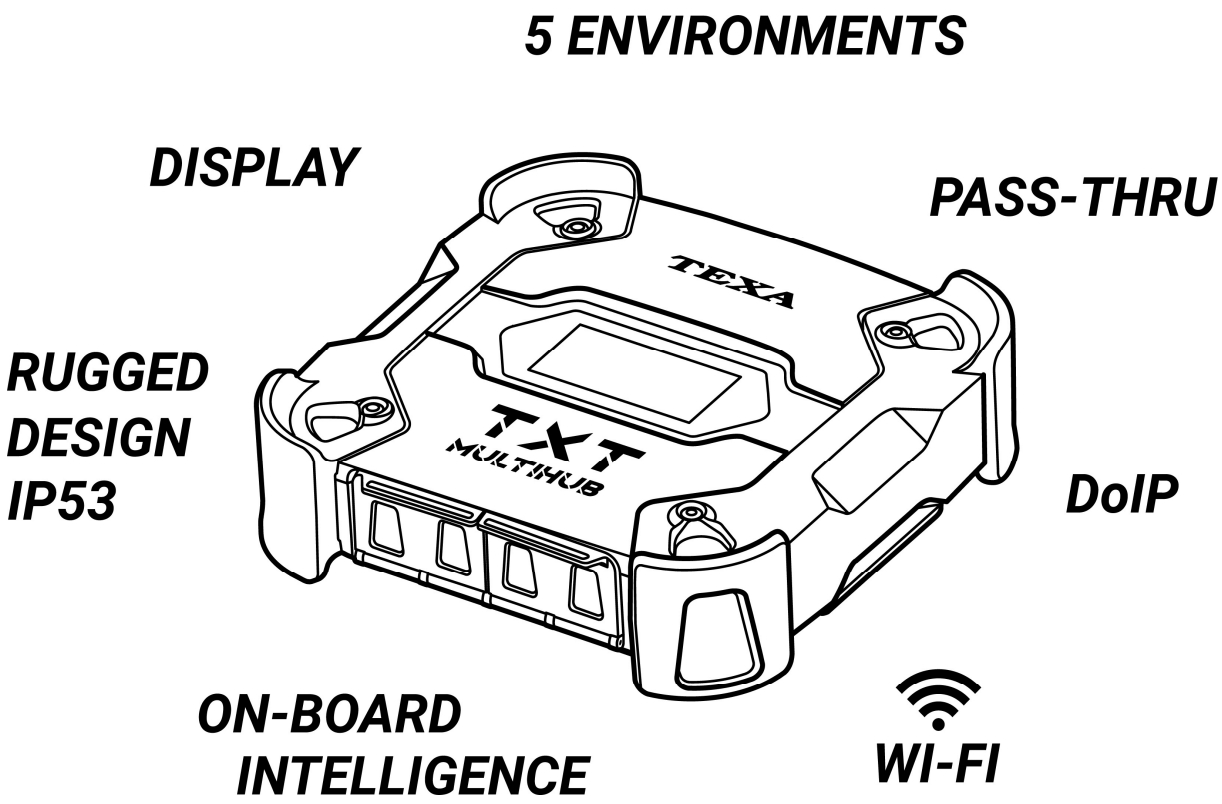
TXT MULTIHUB the only one on the market with these unique features

- **Full multi-environment**
- **Display** integrated in the VCI
- **On-board operating system**, Linux

Not all competitors have

- **IP53 grade**
- **WiFi**

TXT MULTIHUB in detail



"It is the unique top-of-the-range interface for **all environments.** **Improved usability** thanks to an integrated **display**.
Now even more rugged thanks to the new **IP 53**-certified Rugged design that ensures water and dust resistance and shock and drop absorption thanks to **MIL-810G** (transit drop test) certification. Expanded connectivity thanks to the presence of a **WiFi** and Ethernet module in addition to BT and USB. **WiFi** improves **operability** through faster file transfer and wireless **DoIP** diagnostics. **VCI** equipped with a LINUX operating system, **which makes it expandable, able to evolve and ready for the diagnosis of the future.** Linux also improves **cyber security** and **efficiency** thanks to communication in **Smart mode** and the ability to automatically switch to the FW required for the type of diagnosis chosen including **Pass-Thru** ,**DoIP** (CAR) protocols and the new CAN FD complete the package.

Digital with display

The VCI is equipped with a display that works as a user interface, thus improving usability.

The display shows information according to 3 types of messages.

Yellow/Black backlight OLED display

MULTIHUB operations always under control

More than 40 messages to give the mechanic all the information needed during diagnostic operations

Status	Display
The VCI is turning on.	AUTOCHECK
The VCI warranty has not been activated yet.	NO WARRANTY
The VCI is awaiting commands.	READY
The VCI is ready to carry out a STANDARD diagnosis.	DIAGNOSIS
The VCI is ready to carry out a DoIP diagnosis via Wi-Fi.	DOIP
The VCI is ready to carry out a DoIP diagnosis via network cable.	DOIP ETHERNET
The VCI is in Pass-Thru mode.	PASSTHRU
The VCI is being configured for the dynamic tests.	REC ...

	REC ON
IOSIS	
	POWERDOWN
ɔly.	RESTARTING ...

	Display
	USB
	BLUETOOTH
ay unit)	HOTSPOT
Wi-Fi network: the name of nal strength are displayed)	1234_WIFI
Serial number It appears for a few seconds during the shutdown phase.	SN:DN1AT000001

Battery voltage at a glance

The **technician sees** directly in the TXT MULTIHUB the **battery voltage** of the vehicle to which it is connected, so that he can always check whether the **minimum voltage** is present for carrying out a certain diagnostic operation, e.g. an adjustment or Pass Thru operations.

MULTIHUB even more robust, practical, handy

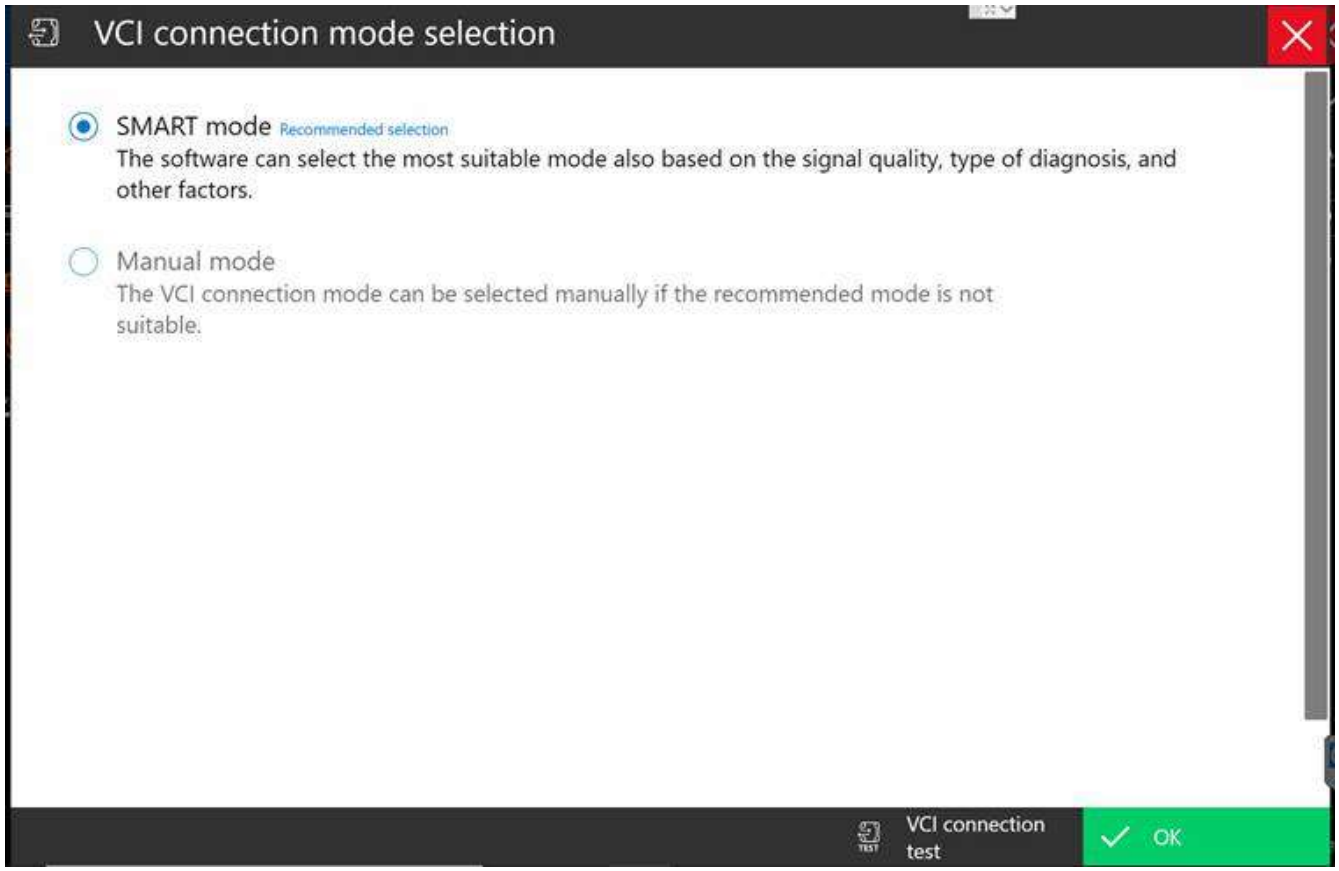
- ✓ **Drop certified** (MIL-STD-810G/transit drop test for 1.22m drop onto concrete)
- ✓ **IP53** grade for water (splash) and dust resistance.
- ✓ Rubberized profiles for greater impact resistance.
- ✓ Electrical safety IEC 62368-1 ed.3.0 certified by the accredited institute, TÜV Süd (including the 1 metre drop of the device onto concrete). This is a new standard that came into force on 20 December 2020.

Unlimited connectivity, a true MULTIHUB

The VCI has several communication modes, some of which are reserved for specific types of diagnosis:

- **WiFi** reserved for **CAN, CAN FD and DoIP** diagnosis operations.
- **Ethernet** reserved for **DoIP** (ISO 13400) diagnosis operations.
- **Bluetooth** dedicated to **standard** diagnostics.
- USB for all types of diagnosis including **Pass Thru (J2534).**

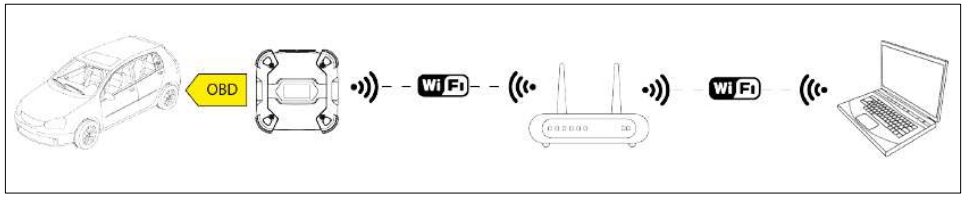
SMART mode for an intelligent connectivity



How the WiFi connectivity works

The WiFi communication mode can work in two different ways, Station or Hotspot.

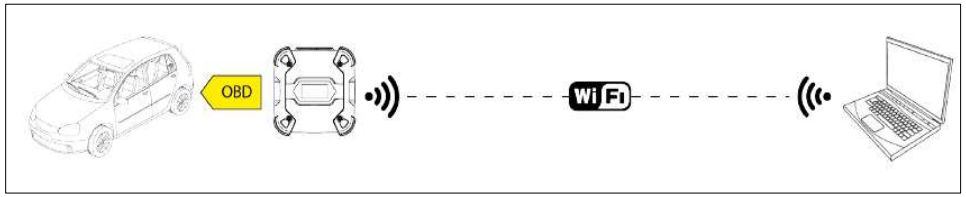
STATION



The VCI connects to the display unit in **STATION** mode, i.e. using the workshop **WiFi network** rather than a **smartphone** by enabling the "**WiFi Router**" mode.
The **visualiser** will then **continue** to **have access** to the internet.

This mode **provides a wider coverage** if the workshop WiFi network is equipped with WiFi repeaters.

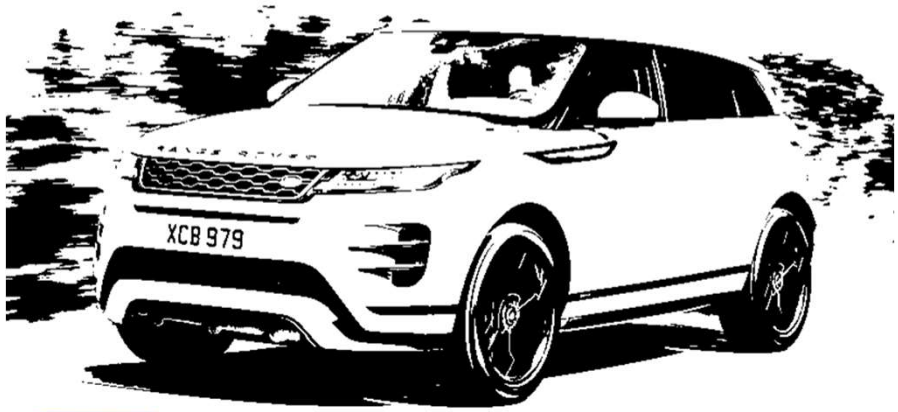
HOTSPOT



Alternatively, the VCI can connect to the display unit in **HOTSPOT** mode (point-point), i.e. by creating a WiFi network with which to connect to the display unit.

In this case, **the display unit will not maintain an active connection to the Internet** via WiFi.
This mode is useful when you do not have a WiFi network and want to take advantage of WiFi's ability to provide greater communication coverage than Bluetooth.

Integrated hardware for DoIP



DoIP ISO 13400

The CAN BUS communication architecture between ECUs adopted by vehicle manufacturers is increasingly being flanked or supplanted by the communication technology known as ETHERNET BUS, which uses an IP-based connection to carry out vehicle diagnostics.

This is why **DoIP** diagnostics technology has been **incorporated** into the **TXT MULTIHUB.**

It is **sufficient to connect the diagnostic interface to work** on vehicles equipped with this technology.

In addition, with **MULTIHUB** it is now possible to carry out **DoIP** diagnostics **wirelessly** thanks to the WiFi communication mode.

What are manufacturers doing? Increasing DoIP diagnostics

Volvo makes **both CAN and DoIP** protocols **available** for diagnosis.

Jaguar/Land Rover has **released all 2020 models with DoIP only** (No CAN diagnosis!).

VW is currently **going ahead** with the **CAN** protocol. The **DoIP** architecture has only been implemented for a few models, while **diagnosis** has **not yet been released**.

Ford has implemented the architecture on all new models but **has not released the diagnosis.**

DoIP technology, indicatively, will be the future standard for diagnostic communication.

Pass Thru improved

The Pass Thru SAE J2534 standard aims to ensure that specific ECU diagnosis and reprogramming operations can be carried out via a third-party VCI.

The **TXT MULTIHUB complies** with standards **J2534-1 and J2534-2.**

TXT MULTIHUB integrates an innovative **feature** for the automatic switch between the **Pass Thru and standard diagnosis modes** (firmware), ensuring better operation and greater speed by only needing to connect the VCI to the OBD socket and start the OE SW.

SW compatibility and price list

TXT MULTIHUB is compatible with the SW versions listed below:

- CAR: major version 73.0.0
- TRUCK: major version 51.0.0
- OHW: major version 22.0.0
- BIKE: major version 34.0.0
- MARINE: major version 16.0.0

Please note only compatible with Windows 10

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Roll Out

Simplifying the present, anticipating the future

Datasheet TXT MULTIHUB

Main processor:
- Tipo: iMX6 1 GHz
- RAM: 512 Mbyte
- Mass Storage: eMMC 8 Gbyte

Co-Processor:
- Tipo: STM32F439 168 MHz
- RAM: 2 MByte SRAM, 8 MByte SDRAM
- Flash: 2 MByte

Power connector: PWR: 2.1 DC jack

Power supply: 12 - 24 Vdc (da batteria del veicolo tramite connettore OBD o cablaggi specifici)

Absorption 1 A @12 V max

USB connectors:
- USB: USB 2.0 host type A max 1 A out
- USB DEVICE: USB 2.0 device type B (priority connector)

Bluetooth communication: BLE 4.2 and BT classic EDR

WiFi communication: WiFi IEEE 802.11 a/b/g/n 2.4 GHz

Operating band: 2400 ÷ 2483.5 MHz

Maximum radio frequency power transmitted: 10 dBm (2400 ÷ 2483,5 MHz)

Diagnostic connectors:
- DIAGNOSIS: DSUB-26HD (ISO 22900-1)
- DoIP: RJ45 (UDP/TCP 13400)

Electronic switch: 2 vie, 13 posizioni indipendenti

ECU reprogramming connector: PV (SAE J2534-1)

User interface: Display OLED 64x128 dot

Operating temperature: 0 ÷ 50 °C

Operating moisture: 10 ÷ 80 % senza condensa

Dimensions [mm]: 176.1x175.4x46.8

Weight: 600 g

IP rating: IP53 *
(*) With tightly closed protective caps.

Supported protocols:
- Codici di lampeggio (blink codes)
- K, L (con protezione di corrente 100 mA) ISO9141-2, ISO14230
- CAN ISO11898-2 High Speed
- Second ISO11898-2 CAN channel
- Second ISO11898-2:2016 CAN FD channel
- CAN ISO 11898-3 LOW Speed
- CAN SAE J2411 Single Wire
- SAE J1850 PWM
- SAE J1850 VPW
- SAE J2534-1
- SAE J1708
- UDP/TCP ISO 13400 (DoIP)