# Diagnostics over IP (DoIP ISO 13400)

- Allowed by CARB beginning with MY 2026 vechicles
- In <u>addition</u> to CAN protocols
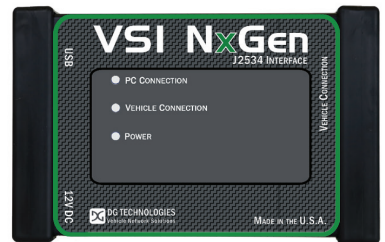- Design/redesign your automotive networks now!

Benefits of DoIP

DoIP ISO 13400

- Diagnostics run over Ethernet TCP/IP
- Faster than CAN!
- Simplifies complex diagnostic tasks
- Direct vehicle network access
    - A Vehicle Communication Interface (VCI) is not needed
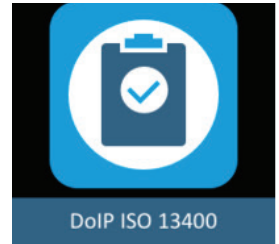
Powerful VCI is best

- When diagnostics use a CAN-bus/Ethernet mix
- Use DG's VSI NxGen to benefit from DoIP upcoming availability

Automotive Cybersecurity

- SAE J3138: Describes actions to ensure safe vehicle operation
- When connected test equipment/data collection device:
  - Is compromised external to the vehicle
  - Applies to SAE J1979, ISO 15765 & 14229
- Can apply to Over-The-Air (OTA) updates & Re-flashing

XENA NETWORKS   Ospirent   STAR COOPERATION®

Automotive Ethernet

- Is an additional vehicle network to CAN
- Speeds of 10 to 1000baseT
- DG Tech, Star, Spirent & Xena are advanced testing resources
- DG Tech has 2-wire AE conversion
  - From 4-wire standard Ethernet
  - Speeds of 100baseT to 1000baseT (1G)
  - Available in SFP Module
    - **S**mall **F**orm-function **P**luggable

- Use with Spirent's comTT for AE design & engineering the best in vehicle networks!

Contact DG for all of your Automotive Ethernet Needs!

DG TECHNOLOGIES
Vehicle Network Solutions
www.dgtech.com/cyber-security

Synercon TECHNOLOGIES
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