

CANcrypt

CAN Message Encryption

TECHNOLOGY:

Arilou **CANcrypt** provides vital **message encryption** for CAN messages, enhancing privacy, enabling advanced use-cases, and extending the viability of current and legacy **Controller Area Networks (CAN)**.

CAN Message Encryption

- **Private Message Transmission**

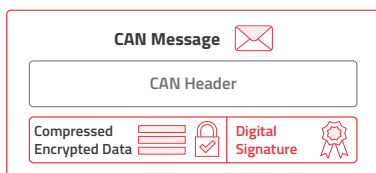
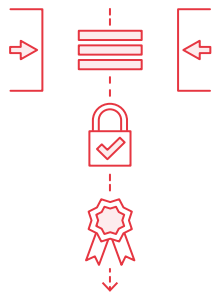
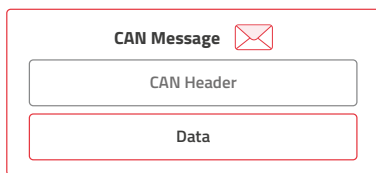
Ensures the privacy of CAN messages, preventing snooping.

- **Selective Implementation**

Implementation can be tailored for use with only specified messages.

BENEFITS:

CANcrypt encrypts CAN messages, preventing snooping attacks from gaining access to both critical vehicle data and customer information. As in-vehicle use-cases evolve, preventing unauthorized monitoring of network messages becomes increasingly important.



- **Backward Compatibility:** No need to change gateways or nonparticipating ECUs as frame format remains unchanged.
- **Heterogeneous Compatibility:** Works with bus architectures where only select ECUs make use of the mechanism.
- **Real-time:** No significant latency added.
- **Compact:** Lightweight, unobtrusive code allows for optimal performance.
- **Standardized:** ISO 9001, ISO 26262 and ASIL-B compliant.
- **Stateless:** Each message frame is independently encrypted and decrypted.
- **Software-Based:** No heavy resources required allowing for the use of legacy and modern CAN architectures, reducing cost.
- **Stateless:** Each message frame is independently encrypted and authenticated.
- **Flexible:** Can use Arilou or OEM authentication algorithm and employ hardware acceleration, platform permitting.

ABOUT ARILOU:

Arilou Automotive Cybersecurity, part of NNG Group, believes in an automotive future secured against cyber-attack. A leading provider of pioneering cybersecurity solutions for the automotive industry, Arilou was the first to introduce CAN (**Sentinel-CAN, Sentinel-TRK**) and automotive Ethernet (**Sentinel-ETH**) in-vehicle network security.

Winner of **Frost & Sullivan's** 2019 Technology Innovation award, and independently tested by **UMTRI**, with perfect results, Arilou's **Sentinel-CAN** software intrusion detection and prevention system and **Sentinel-PHY** electronic fingerprint authentication offer supreme detection and prevention rates with zero false alarms. With its holistic approach and low-cost multi-layered solutions, **Arilou** is making full protection for vehicles a reality.

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