



**Advance notice of NMEA 2000®
Level B Certification**

December 12, 2002

NMEA 2000® Devices are certified to a Level of Compliance to the Standard. The level of certification is determined by the functionality of the device to the network, and by the information the device must provide or receive from the network.

For instance, if a device needs to send or receive a PGN with a data size greater than the fast packet message size of 223 bytes, then it would require the Transport Protocol. This protocol is part of the Level A Certification. Another device such as a speed transducer may only need to transmit the PGN for Speed, which is a single frame message. This type of device would not need the functionality or capabilities required for Level A certification, and could be certified to a Level B compliance. This allows the manufacture to scale their product to the necessary NMEA 2000® Certification Level.

A manufacturer's product is not limited to only Level A or Level B. A product certified to Level B, may offer one or more of the Level A capabilities if desired. Below is a summary of the capabilities that are optional for NMEA 2000® Level B certification. The section numbers identified below are from Version 1.000 of the NMEA 2000® Standard. The next release, version 1.002, shall incorporate the contents of this document.

Data Link Layer

Section 3.1.1 Application of Data Transfer Methods

The TRANSPORT PROTOCOL (ISO MULTI-PACKET) is optional.

Section 3.1.1.2 Minimum Implementation of ISO Multi-Packet

This is optional.

Section 3.1.2 Concurrent Message Processing

This is optional.

Section 3.1.4.7 Message separation by a minimum of 10 CAN frames.

This requirement has been **removed** from NMEA 2000®.

Section 3.2.1 Complex Data Request Group Function Message.

This is optional.

Section 3.2.2 Command Group Function Message.

This is optional.

Section 3.2.3 Expanded Acknowledgment Group Function Message

This is optional.

Section 8.4.1 Transmitted PGN List

This is optional.

Section 8.4.2 Received PGN List
This is optional.

The Table 9-2 below contains the minimum message implementation for Level B Certification.

Table 0-2 – Certification Level B

Message Name / Functionality	PGN
Address Claim	ISO 60928
Product Information	NMEA 2000®, 126996
Acknowledgment	ISO 59392
Request	ISO 59904