



National Marine Electronics Association
International Marine Electronics Association

Technical Corrigendum TC# 2000 201401031

NMEA 2000 PGN 126208 Clarifications

This corrigendum further clarifies the multiple usages of PGN 126208. There are seven group functions associated with PGN 126208. The text descriptions for each specific group function have now been placed within the header of each group function. Previously, all text describing each of the group functions were only listed in the Request Group Function PGN description.

The clarification of the Read Fields and Write Fields group functions (and their associated Reply group functions) was necessary to clarify their use to interrogate and configure PGNs that have at least one instance field.

The Write Fields group function may be used to modify a device's factory default PGN instances to create a unique device with unique PGN instance numbers.

The Read Fields group function can be similarly used to interrogate the current PGN instance values of any PGNs not being sent periodically.

Manufacturers may consider supporting the Write Field group function as a standard method for field configuration of a device's PGN instances.

Documents Affected

- NMEA 2000 Appendix B, Version 2.000
- Please use the following updated 126208 PGN definitions for your documentation.

NMEA - Request group function

PGN: 126208

hex: 1ED00

The Request / Command / Acknowledge Group type of function is defined by first field. The message will be a Request, Command, or Acknowledge Group Function.

The Request Group Function is defined as follows:

This message requests the transmission of a specific set of data in a Parameter Group by setting variable parameters within the Parameter Group specified by the field number. Field number and parameter value may appear in any order in this message. When multiple fields and parameters are specified the request is treated as an "AND" function. This PGN may be used to set the transmission interval and the delay before the first transmission.

NMEA encourages manufacturers to provide the capability of altering the values of transmission time for NMEA certified products on the network. When the values of transmission time or delay before the first transmission are altered, they should be maintained after power cycling. All parameter value fields of this request must be padded if necessary to ensure byte boundaries are adhered to.

Note 1: Acknowledge Requirements - Requested data as scheduled or Acknowledge Group Function with acknowledgement error codes.

Single Frame: No Priority Default: 3 Default Update Rate: milliseconds Frequency: NA cycles per second
Destination: Address Query Support: Required Command Support: Optional ACK Rqmnts: Note 1

Field # Field Name Original Reference ID # 1

| | | | |
|---|--|---|-----------------------------|
| 1 | Request Group Function Code | Byte Field Size: 1 | Request Parameter: Required |
| | | Bit Field Size: | Command Parameter: Required |
| | DD144 Group Function, Request/Command/Acknowledge | 0 = Request Message, 1 = Command Message, 2 = Acknowledge Message, 3 = Read Fields, 4 = Read Fields Reply, 5 = Write Fields, 6 = Write Fields Reply | |

DF53 Integer, 8 bit unsigned uint8 Range: 0 to 252 Resolution: 1 bit Unit-less number

This is the Request message, set = 0x00.

| | | | |
|---|-----------------------|---|------------------------------|
| 2 | Requested PGN | Byte Field Size: | Request Parameter: Required |
| | | Bit Field Size: 24 | Command Parameter: Required |
| | DD009 PGN | 24-bit Parameter Group Number (PGN) expressed in binary, LSB is transmitted first | |
| | DF52 Bit field | bit(n) Range: Variable Resolution: 1 | Used to construct bit fields |

| | | | |
|---|-------------------------------------|---|-----------------------------|
| 3 | Transmission interval | Byte Field Size: 4 | Request Parameter: Optional |
| | | Bit Field Size: | Command Parameter: Optional |
| | DD035 Data transmit interval | Time interval between data transmissions Where: 0x0000 0000 = Turn-off transmission, 0xFFFF FFFE = Restore Default Interval, (added NMEA Version 1.201) 0xFFFF FFFF = Do not change interval | |
| | DF65 Time interval, standard | uint32 Range: 0 to ~4.295x10E+6 s Resolution: 1x10E-3 s | |

0xFFFF FFFF in this field and 0xFFFF in field 4: Transmit now without changing timing variables.

| | | | |
|----------|-------------------------------------|--|------------------------------------|
| 4 | Transmission interval offset | <i>Byte Field Size:</i> <input type="text" value="2"/> | <i>Request Parameter:</i> Optional |
| | | <i>Bit Field Size:</i> | <i>Command Parameter:</i> Optional |

DD036 Data transmit offset Offset in transmit time from time of request command: 0x0 = transmit immediately, 0xFFFF = Do not change offset.

DF66 Time interval, .01sec **uint16** *Range:* 0 to 655.32s *Resolution:* 1x10E-2sec

0xFFFF in this field and 0xFFFF FFFF in field 3: Transmit now without changing timing variables.

| | | | |
|----------|--|--|------------------------------------|
| 5 | Number of Pairs of Request Parameters to follow | <i>Byte Field Size:</i> <input type="text" value="1"/> | <i>Request Parameter:</i> Optional |
| | | <i>Bit Field Size:</i> | <i>Command Parameter:</i> Optional |

DD006 Generic counter, short Numeric count, event counter, sequence counter

DF53 Integer, 8 bit unsigned **uint8** *Range:* 0 to 252 *Resolution:* 1 bit Unit-less number

| | | | |
|----------|--|--|------------------------------------|
| 6 | Field number of first requested parameter | <i>Byte Field Size:</i> <input type="text" value="1"/> | <i>Request Parameter:</i> Optional |
| | | <i>Bit Field Size:</i> | <i>Command Parameter:</i> Optional |

DD005 Generic numeric ID, short Number of route, waypoint, event, mark, etc.

DF53 Integer, 8 bit unsigned **uint8** *Range:* 0 to 252 *Resolution:* 1 bit Unit-less number

| | | | |
|----------|---|--|------------------------------------|
| 7 | Value of first requested parameter | <i>Byte Field Size:</i> <input type="text" value="?"/> | <i>Request Parameter:</i> Optional |
| | | <i>Bit Field Size:</i> | <i>Command Parameter:</i> Optional |

DD000 Undefined Application specific, defined at time of use

DF00 Undefined **Undefined** *Range:* undefined *Resolution:* undefined Application specific, defined at time of use.

Requested parameter size and type is dependent on the PGN and the specific request parameter field.

| | | | |
|----------|---|--|------------------------------------|
| 8 | Variable Number of fields, Field number 6 repeated | <i>Byte Field Size:</i> <input type="text" value="1"/> | <i>Request Parameter:</i> Optional |
| | | <i>Bit Field Size:</i> | <i>Command Parameter:</i> Optional |

DD005 Generic numeric ID, short Number of route, waypoint, event, mark, etc.

DF53 Integer, 8 bit unsigned **uint8** *Range:* 0 to 252 *Resolution:* 1 bit Unit-less number

| | | | |
|----------|---|--|------------------------------------|
| 9 | Variable Number of fields, Field number 7 repeated | <i>Byte Field Size:</i> <input type="text" value="?"/> | <i>Request Parameter:</i> Optional |
| | | <i>Bit Field Size:</i> | <i>Command Parameter:</i> Optional |

DD000 Undefined Application specific, defined at time of use

DF00 Undefined **Undefined** *Range:* undefined *Resolution:* undefined Application specific, defined at time of use.

Requested parameter size and type is dependent on the PGN and the specific request parameter field.

The Request / Command / Acknowledge Group type of function is defined by first field. The message will be a Request, Command, or Acknowledge Group Function.

The Command Group Function is defined as follows:

The Command Group Function message is directed to a specific address, the Global Address (255) shall not be used. This command sets the value of one, some or all parameters in a Parameter Group. The number of parameters to set is in field 5, then follows the field number and the new value repeated for each of them. A Parameter Group may contain one group of parameters out of multiple instances where the instance number of the group is given in one field. A command to set any parameter of such a group must contain the field number and value of the group instance number.

Example is setting the name of a Tracked Target in PGN 128520, where the Target ID must be specified with the new Name. The field number and value of the group instance is included in the number of parameters to set (field 5) and is listed together with them. Field number and parameter value may appear in any order in this message, also all parameter value fields will be padded if necessary to ensure byte boundaries are adhered to.

When sending a command to a device, when accepted if the PGN referenced has command capability, then fields 6 and 7 shall identify the parameters being commanded, and the commanded values.

Note 1: Acknowledge Requirements- Acknowledgment Group Function Message (PGN 126208) shall be sent in response to all Commands.

Single Frame: **No** Priority Default: **3** Default Update Rate: milliseconds Frequency: **NA** cycles per second
 Destination: **Address** Query Support: **Optional** Command Support: **Optional** ACK Rqmts: **Note 1**
 Field # Field Name Original Reference ID # 2

| | | | | | |
|--|--|---------------|---|--------------------------|------------------------------------|
| 1 | Command Group Function Code | | Byte Field Size: 1 | | Request Parameter: Required |
| | | | Bit Field Size: | | Command Parameter: Required |
| | DD144 Group Function, Request/Command/Acknowledge | | 0 = Request Message, 1 = Command Message, 2 = Acknowledge Message, 3 = Read Fields, 4 = Read Fields Reply, 5 = Write Fields, 6 = Write Fields Reply | | |
| | DF53 Integer, 8 bit unsigned | uint8 | Range: 0 to 252 | Resolution: 1 bit | Unit-less number |
| This is the Command message, set = 0x01. | | | | | |
| 2 | Commanded PGN | | Byte Field Size: | | Request Parameter: Required |
| | | | Bit Field Size: 24 | | Command Parameter: Required |
| | DD009 PGN | | 24-bit Parameter Group Number (PGN) expressed in binary, LSB is transmitted first | | |
| | DF52 Bit field | bit(n) | Range: Variable | Resolution: 1 | Used to construct bit fields |
| 3 | Priority Setting | | Byte Field Size: | | Request Parameter: Optional |
| | | | Bit Field Size: 4 | | Command Parameter: Optional |
| | DD182 Priority, Set | | 0x0 to 0x7 = commanded priority value; 0x8 = do not change priority; 0x9 = return priority to default; 0xA to 0xF = reserved | | |
| | DF52 Bit field | bit(n) | Range: Variable | Resolution: 1 | Used to construct bit fields |

4 NMEA Reserved *Byte Field Size:* *Request Parameter:*
Bit Field Size: *Command Parameter:*

DD001 Reserved field Variable number of reserved bits, all set to logic "1"

DF52 Bit field **bit(n)** *Range:* Variable *Resolution:* 1 Used to construct bit fields

Used to align subsequent data on a byte boundary.

5 Number of Pairs of Commanded Parameters to follow *Byte Field Size:* *Request Parameter:* Optional
Bit Field Size: *Command Parameter:* Optional

DD006 Generic counter, short Numeric count, event counter, sequence counter

DF53 Integer, 8 bit unsigned **uint8** *Range:* 0 to 252 *Resolution:* 1 bit Unit-less number

6 Field number of first commanded parameter *Byte Field Size:* *Request Parameter:* Optional
Bit Field Size: *Command Parameter:* Optional

DD005 Generic numeric ID, short Number of route, waypoint, event, mark, etc.

DF53 Integer, 8 bit unsigned **uint8** *Range:* 0 to 252 *Resolution:* 1 bit Unit-less number

7 Value of first command parameter *Byte Field Size:* *Request Parameter:* Optional
Bit Field Size: *Command Parameter:* Optional

DD000 Undefined Application specific, defined at time of use

DF00 Undefined **Undefined** *Range:* undefined *Resolution:* undefined Application specific, defined at time of use.

Commanded parameter size and type is dependent on the PGN and the specific command parameter field.

8 Variable Number of fields, Field number 6 repeated *Byte Field Size:* *Request Parameter:* Optional
Bit Field Size: *Command Parameter:* Optional

DD005 Generic numeric ID, short Number of route, waypoint, event, mark, etc.

DF53 Integer, 8 bit unsigned **uint8** *Range:* 0 to 252 *Resolution:* 1 bit Unit-less number

9 Variable Number of fields, Field number 7 repeated *Byte Field Size:* *Request Parameter:* Optional
Bit Field Size: *Command Parameter:* Optional

DD000 Undefined Application specific, defined at time of use

DF00 Undefined **Undefined** *Range:* undefined *Resolution:* undefined Application specific, defined at time of use.

Commanded parameter size and type is dependent on the PGN and the specific command parameter field.

NMEA - Acknowledge group function

PGN: 126208

hex: 1ED00

The Request / Command / Acknowledge Group type of function is defined by first field. The message will be a Request, Command, or Acknowledge Group Function.

The Acknowledge Group Function is defined as follows:

The Acknowledgement reply is transmitted in response to a Request, Command, Read or Write Group Function Message. The Acknowledge Group Function shall be transmitted in response to every Command Message received, indicating acknowledgement or containing the appropriate Error Code. The Acknowledge Group Function is only required in response to a Request, Read or Write Group Function that cannot be satisfied. The Acknowledge Group function shall transmit all fields applicable to the Group Function being acknowledged, fields where the error does not exist are set to 0x0 (No Error/Acknowledge).

Single Frame: **No** Priority Default: **3** Default Update Rate: _____ milliseconds Frequency: **NA** cycles per second
 Destination: **Address** Query Support: **Required** Command Support: _____ ACK Rqmnts: **None**

Field # Field Name Original Reference ID # 3

| | | | |
|--------------|---|---|------------------------------------|
| 1 | Acknowledgment Group Function Code | Byte Field Size: 1 | Request Parameter: Required |
| | | Bit Field Size: _____ | Command Parameter: Required |
| DD144 | Group Function, Request/Command/Acknowledge | 0 = Request Message, 1 = Command Message, 2 = Acknowledge Message, 3 = Read Fields, 4 = Read Fields Reply, 5 = Write Fields, 6 = Write Fields Reply | |

DF53 Integer, 8 bit unsigned **uint8** Range: **0 to 252** Resolution: **1 bit** Unit-less number

This is the Acknowledgement message, set = 0x02.

| | | | |
|--------------|--|---|--|
| 2 | Requested or Commanded PGN # being acknowledged | Byte Field Size: _____ | Request Parameter: Required |
| | | Bit Field Size: 24 | Command Parameter: Required |
| DD009 | PGN | 24-bit Parameter Group Number (PGN) expressed in binary, LSB is transmitted first | |
| DF52 | Bit field | bit(n) | Range: Variable Resolution: 1 Used to construct bit fields |

| | | | |
|--------------|------------------------------|--|------------------------------------|
| 3 | PGN error code | Byte Field Size: _____ | Request Parameter: Optional |
| | | Bit Field Size: 4 | Command Parameter: Optional |
| DD037 | Error codes, Acknowledgement | 0x0 = No Error/Acknowledge, 0x1 = PGN not supported, 0x2 = PGN temporarily not available, 0x3 = Access denied, 0x4 = Request or Command is not supported, 0x5 = Definer Tag is not supported, 0x6 = Read or Write is not supported | |

DF52 Bit field **bit(n)** Range: **Variable** Resolution: **1** Used to construct bit fields

| | | | |
|--------------|--|--|------------------------------------|
| 4 | Transmission Interval / Priority error code | Byte Field Size: _____ | Request Parameter: Optional |
| | | Bit Field Size: 4 | Command Parameter: Optional |
| DD139 | Error codes Transmit interval acknowledgement | 0x0 = No Error/Acknowledge, 0x1 = Transmit Interval /Priority not supported, 0x2 = Transmit interval is less than measurement/calculation interval, 0x3 = Access denied, 0x4 = Request is not supported. | |

DF52 Bit field **bit(n)** Range: **Variable** Resolution: **1** Used to construct bit fields

For read or write, group function acknowledgement, this field shall be set to 0x0.

NMEA - Acknowledge group function

PGN: 126208

hex: 1ED00

5 **Number of Requested or Commanded Parameters** *Byte Field Size:* *Request Parameter:* Optional
Bit Field Size: *Command Parameter:* Optional

DD006 Generic counter, short

Numeric count, event counter, sequence counter

DF53 Integer, 8 bit unsigned **uint8** *Range:* 0 to 252 *Resolution:* 1 bit Unit-less number

If Field 3 is 0x4 or you are replying to a read or write group function, this field shall be set to 0xFF. Value 0xFF indicates no fields follow.

6 **First parameter error code** *Byte Field Size:* *Request Parameter:* Optional
Bit Field Size: *Command Parameter:* Optional

DD141 Error Codes Command Acknowledgement

0x0 = No Error/Acknowledge;
0x1 = Invalid request or command parameter field;
0x2 = Temporarily unable to comply;
0x3 = Request or command parameter out-of-range;
0x4 = Access denied;
0x5 = Request or Command is not supported;
0x6 = Read or Write is not supported;

DF52 Bit field **bit(n)** *Range:* Variable *Resolution:* 1 Used to construct bit fields

7 **Variable Number of fields, Field number 6 repeated** *Byte Field Size:* *Request Parameter:* Optional

Bit Field Size: *Command Parameter:* Optional

DD141 Error Codes Command Acknowledgement

0x0 = No Error/Acknowledge;
0x1 = Invalid request or command parameter field;
0x2 = Temporarily unable to comply;
0x3 = Request or command parameter out-of-range;
0x4 = Access denied;
0x5 = Request or Command is not supported;
0x6 = Read or Write is not supported;

DF52 Bit field **bit(n)** *Range:* Variable *Resolution:* 1 Used to construct bit fields

NMEA - Read Fields - group function

PGN: 126208

hex: 1ED00

This Read Fields Group Function provides a means to read specific fields in a PGN.

When Field 2 (PGN number) contains a non-proprietary PGN number, field 3, field 4 and field 5 are not included in this message.

If the receiver of this message can comply, the receiver will send to the transmitter a Read Fields Reply Group Function. If the receiver cannot comply, an Acknowledge Group Function shall be sent.

Single Frame: No Priority Default: 3 Default Update Rate: 0 milliseconds Frequency: NA cycles per second
Destination: Address Query Support: Optional Command Support: Optional ACK Rqmnts: None
Field # Field Name Original Reference ID # 191

| | | | |
|-------|---|---|--|
| 1 | Complex Request Group Function Code | Byte Field Size: 1 | Request Parameter: Optional |
| | | Bit Field Size: | Command Parameter: Optional |
| DD144 | Group Function, Request/Command/Acknowledge | 0 = Request Message, 1 = Command Message, 2 = Acknowledge Message, 3 = Read Fields, 4 = Read Fields Reply, 5 = Write Fields, 6 = Write Fields Reply | |
| DF53 | Integer, 8 bit unsigned | uint8 | Range: 0 to 252 Resolution: 1 bit Unit-less number |

This is the Read Fields message, set = 0x03

| | | | |
|-------|----------------------------|---|--|
| 2 | PGN Number | Byte Field Size: | Request Parameter: Optional |
| | | Bit Field Size: 24 | Command Parameter: Optional |
| DD009 | PGN | 24-bit Parameter Group Number (PGN) expressed in binary, LSB is transmitted first | |
| DF52 | Bit field | bit(n) | Range: Variable Resolution: 1 Used to construct bit fields |
| 3 | Manufacturer's Code | Byte Field Size: | Request Parameter: Optional |
| | | Bit Field Size: 11 | Command Parameter: Optional |
| DD172 | NMEA Manufacturer Code | Assigned by NMEA Committee | |
| DF52 | Bit field | bit(n) | Range: Variable Resolution: 1 Used to construct bit fields |

When Field 2 (PGN number) contains a non-proprietary PGN number, this field is not included in the message.

| | | | |
|-------|----------------------|--|--|
| 4 | NMEA Reserved | Byte Field Size: | Request Parameter: |
| | | Bit Field Size: resv 2 | Command Parameter: |
| DD001 | Reserved field | Variable number of reserved bits, all set to logic "1" | |
| DF52 | Bit field | bit(n) | Range: Variable Resolution: 1 Used to construct bit fields |

When Field 2 (PGN number) contains a non-proprietary PGN number, this field is not included in the message.

NMEA - Read Fields - group function

PGN: 126208

hex: 1ED00

| | | | | | | | |
|---|--|------------------|---------------|-------------------------|---|---------------------------|---|
| 5 | Industry Group | | | <i>Byte Field Size:</i> | | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | 3 | <i>Command Parameter:</i> | Optional |
| | DD168 Industry Group | | | | 0 = Global; 1 = On-Highway; 2 = Agricultural and Forestry; 3 = Construction; 4 = Marine; 5 = Industrial - Process Control - Stationary (Gen-Sets) 6 = Reserved for SAE 7 = Reserved for SAE | | |
| | DF52 Bit field | bit(n) | <i>Range:</i> | Variable | | <i>Resolution:</i> | 1 Used to construct bit fields |
| When Field 2 (PGN number) contains a non-proprietary PGN number, this field is not included in the message. | | | | | | | |
| 6 | Unique ID | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD005 Generic numeric ID, short | | | | Number of route, waypoint, event, mark, etc. | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | | <i>Resolution:</i> | 1 bit Unit-less number |
| This field links the read fields reply group function with the read fields group function. | | | | | | | |
| 7 | Number of Selection Pairs | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD006 Generic counter, short | | | | Numeric count, event counter, sequence counter | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | | <i>Resolution:</i> | 1 bit Unit-less number |
| 8 | Number of Parameter Pairs to be Read | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD006 Generic counter, short | | | | Numeric count, event counter, sequence counter | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | | <i>Resolution:</i> | 1 bit Unit-less number |
| 9 | Field Number of First Selection Pair | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD005 Generic numeric ID, short | | | | Number of route, waypoint, event, mark, etc. | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | | <i>Resolution:</i> | 1 bit Unit-less number |
| 10 | Field Value of First Selection Pair | | | <i>Byte Field Size:</i> | ? | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD000 Undefined | | | | Application specific, defined at time of use | | |
| | DF00 Undefined | Undefined | <i>Range:</i> | undefined | | <i>Resolution:</i> | undefined Application specific, defined at time of use. |
| 11 | Variable Number of fields, field 9 repeated | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD005 Generic numeric ID, short | | | | Number of route, waypoint, event, mark, etc. | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | | <i>Resolution:</i> | 1 bit Unit-less number |

NMEA - Read Fields - group function**PGN: 126208****hex: 1ED00**

| | | | | |
|-----------|--|--|---|---|
| 12 | Variable Number of Fields, field 10 repeated | <i>Byte Field Size:</i> <input type="text" value="?"/> <i>Bit Field Size:</i> | <i>Request Parameter</i> <i>Command Parameter:</i> | Optional Optional |
| | DD000 Undefined | Application specific, defined at time of use | | |
| | DF00 Undefined | Undefined <i>Range:</i> undefined | <i>Resolution:</i> undefined | Application specific, defined at time of use. |
| 13 | Field Number of First Parameter Pair to be Read | <i>Byte Field Size:</i> <input type="text" value="1"/> <i>Bit Field Size:</i> | <i>Request Parameter</i> <i>Command Parameter:</i> | Optional Optional |
| | DD005 Generic numeric ID, short | Number of route, waypoint, event, mark, etc. | | |
| | DF53 Integer, 8 bit unsigned | uint8 <i>Range:</i> 0 to 252 | <i>Resolution:</i> 1 bit | Unit-less number |
| 14 | Variable Number of Fields, field 13 repeated | <i>Byte Field Size:</i> <input type="text" value="1"/> <i>Bit Field Size:</i> | <i>Request Parameter</i> <i>Command Parameter:</i> | Optional Optional |
| | DD005 Generic numeric ID, short | Number of route, waypoint, event, mark, etc. | | |
| | DF53 Integer, 8 bit unsigned | uint8 <i>Range:</i> 0 to 252 | <i>Resolution:</i> 1 bit | Unit-less number |

NMEA - Read Fields Reply - group function

PGN: 126208

hex: 1ED00

The Read Fields Reply Group Function is a reply to the Read Fields Group Function.

When the Read Fields Group Function is received, if the receiver can comply, the Read Fields Reply Group Function will be transmitted with the resulting read values.

Single Frame: **No** Priority Default: **3** Default Update Rate: **0** milliseconds Frequency: **NA** cycles per second
 Destination: **Address** Query Support: **Optional** Command Support: **Optional** ACK Rqmnts: **None**

Field # Field Name Original Reference ID # 192

| | | | |
|----------|--|---|--|
| 1 | Complex Request Group Function Code | Byte Field Size: 1 Bit Field Size: | Request Parameter: Optional Command Parameter: Optional |
| | DD144 Group Function, Request/Command/Acknowledge | 0 = Request Message, 1 = Command Message, 2 = Acknowledge Message, 3 = Read Fields, 4 = Read Fields Reply, 5 = Write Fields, 6 = Write Fields Reply | |
| | DF53 Integer, 8 bit unsigned | uint8 Range: 0 to 252 Resolution: 1 bit | Unit-less number |

This is the Read Fields Reply message, set = 0x04

| | | | |
|----------|-----------------------|---|--|
| 2 | PGN Number | Byte Field Size: Bit Field Size: 24 | Request Parameter: Optional Command Parameter: Optional |
| | DD009 PGN | 24-bit Parameter Group Number (PGN) expressed in binary, LSB is transmitted first | |
| | DF52 Bit field | bit(n) Range: Variable Resolution: 1 | Used to construct bit fields |

| | | | |
|----------|-------------------------------------|---|--|
| 3 | Manufacturer's Code | Byte Field Size: Bit Field Size: 11 | Request Parameter: Optional Command Parameter: Optional |
| | DD172 NMEA Manufacturer Code | Assigned by NMEA Committee | |
| | DF52 Bit field | bit(n) Range: Variable Resolution: 1 | Used to construct bit fields |

When Field 2 (PGN number) contains a non-proprietary PGN number, this field is not included in the message.

| | | | |
|----------|-----------------------------|---|--|
| 4 | NMEA Reserved | Byte Field Size: Bit Field Size: resv 2 | Request Parameter: Command Parameter: |
| | DD001 Reserved field | Variable number of reserved bits, all set to logic "1" | |
| | DF52 Bit field | bit(n) Range: Variable Resolution: 1 | Used to construct bit fields |

When Field 2 (PGN number) contains a non-proprietary PGN number, this field is not included in the message.

NMEA - Read Fields Reply - group function

PGN: 126208

hex: 1ED00

| | | | | | | | |
|---|--|------------------|---------------|-------------------------|---|---------------------------|---|
| 5 | Industry Group | | | <i>Byte Field Size:</i> | | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | 3 | <i>Command Parameter:</i> | Optional |
| | DD168 Industry Group | | | | 0 = Global; 1 = On-Highway; 2 = Agricultural and Forestry; 3 = Construction; 4 = Marine; 5 = Industrial - Process Control - Stationary (Gen-Sets) 6 = Reserved for SAE 7 = Reserved for SAE | | |
| | DF52 Bit field | bit(n) | <i>Range:</i> | Variable | | <i>Resolution:</i> | 1 Used to construct bit fields |
| When Field 2 (PGN number) contains a non-proprietary PGN number, this field is not included in the message. | | | | | | | |
| 6 | Unique ID | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD005 Generic numeric ID, short | | | | Number of route, waypoint, event, mark, etc. | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | | <i>Resolution:</i> | 1 bit Unit-less number |
| This field links the read fields group function with the read fields reply group function. | | | | | | | |
| 7 | Number of Selection Pairs | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD006 Generic counter, short | | | | Numeric count, event counter, sequence counter | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | | <i>Resolution:</i> | 1 bit Unit-less number |
| 8 | Number of Parameter Pairs to be Read | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD006 Generic counter, short | | | | Numeric count, event counter, sequence counter | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | | <i>Resolution:</i> | 1 bit Unit-less number |
| 9 | Field Number of First Selection Pair | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD005 Generic numeric ID, short | | | | Number of route, waypoint, event, mark, etc. | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | | <i>Resolution:</i> | 1 bit Unit-less number |
| 10 | Field Value of First Selection Pair | | | <i>Byte Field Size:</i> | ? | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD000 Undefined | | | | Application specific, defined at time of use | | |
| | DF00 Undefined | Undefined | <i>Range:</i> | undefined | | <i>Resolution:</i> | undefined Application specific, defined at time of use. |
| 11 | Variable Number of fields, field 9 repeated | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD005 Generic numeric ID, short | | | | Number of route, waypoint, event, mark, etc. | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | | <i>Resolution:</i> | 1 bit Unit-less number |

NMEA - Read Fields Reply - group function

PGN: 126208

hex: 1ED00

| | | | | |
|----|---|--------------------|---|-----------------------|
| 12 | Variable Number of Fields, field 10 repeated | Byte Field Size: ? | Request Parameter | Optional |
| | | Bit Field Size: | Command Parameter: | Optional |
| | DD000 Undefined | | Application specific, defined at time of use | |
| | DF00 Undefined | Undefined | Range: undefined | Resolution: undefined |
| | | | Application specific, defined at time of use. | |
| 13 | Field Number of First Parameter Pair to be Read | Byte Field Size: 1 | Request Parameter | Optional |
| | | Bit Field Size: | Command Parameter: | Optional |
| | DD005 Generic numeric ID, short | | Number of route, waypoint, event, mark, etc. | |
| | DF53 Integer, 8 bit unsigned | uint8 | Range: 0 to 252 | Resolution: 1 bit |
| | | | Unit-less number | |
| 14 | Field Value of First Parameter Pair to be Read | Byte Field Size: ? | Request Parameter | Optional |
| | | Bit Field Size: | Command Parameter: | Optional |
| | DD000 Undefined | | Application specific, defined at time of use | |
| | DF00 Undefined | Undefined | Range: undefined | Resolution: undefined |
| | | | Application specific, defined at time of use. | |
| 15 | Variable Number of Fields, field 13 repeated | Byte Field Size: 1 | Request Parameter | Optional |
| | | Bit Field Size: | Command Parameter: | Optional |
| | DD005 Generic numeric ID, short | | Number of route, waypoint, event, mark, etc. | |
| | DF53 Integer, 8 bit unsigned | uint8 | Range: 0 to 252 | Resolution: 1 bit |
| | | | Unit-less number | |
| 16 | Variable Number of Fields, field 14 repeated | Byte Field Size: ? | Request Parameter | Optional |
| | | Bit Field Size: | Command Parameter: | Optional |
| | DD000 Undefined | | Application specific, defined at time of use | |
| | DF00 Undefined | Undefined | Range: undefined | Resolution: undefined |
| | | | Application specific, defined at time of use. | |

This Write Fields Group Function provides a means to write specific fields in a PGN.

This Group Function is especially useful when configuring an instance or reference to be used by a node when transmitting a PGN such as PGN 127508. Use Fields 7, 9 and 10 to identify the currently assigned instance value. Use Fields 8, 13 and 14 to identify the new assigned instance value.

When Field 2 (PGN number) contains a non-proprietary PGN number, field 3, field 4 and field 5 are not included in this message.

If the receiver of this message can comply, the receiver will send to the transmitter a Write Fields Reply Group Function. If the receiver cannot comply, an Acknowledge Group Function shall be sent.

Single Frame: **No** Priority Default: **3** Default Update Rate: **0** milliseconds Frequency: **NA** cycles per second
 Destination: **Address** Query Support: **Optional** Command Support: **Optional** ACK Rqmnts: **None**

Field # Field Name Original Reference ID # 193

| | | | |
|----------|--|---|--|
| 1 | Complex Request Group Function Code | Byte Field Size: 1 Bit Field Size: | Request Parameter: Optional Command Parameter: Optional |
| | DD144 Group Function, Request/Command/Acknowledge | 0 = Request Message, 1 = Command Message, 2 = Acknowledge Message, 3 = Read Fields, 4 = Read Fields Reply, 5 = Write Fields, 6 = Write Fields Reply | |
| | DF53 Integer, 8 bit unsigned | uint8 Range: 0 to 252 Resolution: 1 bit | Unit-less number |

This is the Write Fields message, set = 0x05

| | | | |
|----------|-----------------------|---|--|
| 2 | PGN Number | Byte Field Size: Bit Field Size: 24 | Request Parameter: Optional Command Parameter: Optional |
| | DD009 PGN | 24-bit Parameter Group Number (PGN) expressed in binary, LSB is transmitted first | |
| | DF52 Bit field | bit(n) Range: Variable Resolution: 1 | Used to construct bit fields |

| | | | |
|----------|-------------------------------------|---|--|
| 3 | Manufacturer's Code | Byte Field Size: Bit Field Size: 11 | Request Parameter: Optional Command Parameter: Optional |
| | DD172 NMEA Manufacturer Code | Assigned by NMEA Committee | |
| | DF52 Bit field | bit(n) Range: Variable Resolution: 1 | Used to construct bit fields |

When Field 2 (PGN number) contains a non-proprietary PGN number, this field is not included in the message.

| | | | |
|----------|-----------------------------|---|--|
| 4 | NMEA Reserved | Byte Field Size: Bit Field Size: resv 2 | Request Parameter: Command Parameter: |
| | DD001 Reserved field | Variable number of reserved bits, all set to logic "1" | |
| | DF52 Bit field | bit(n) Range: Variable Resolution: 1 | Used to construct bit fields |

When Field 2 (PGN number) contains a non-proprietary PGN number, this field is not included in the message.

NMEA - Write Fields - group function

PGN: 126208

hex: 1ED00

| | | | | | | | |
|---|--|------------------|---------------|-------------------------|---|---------------------------|---|
| 5 | Industry Group | | | <i>Byte Field Size:</i> | | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | 3 | <i>Command Parameter:</i> | Optional |
| | DD168 Industry Group | | | | 0 = Global; 1 = On-Highway; 2 = Agricultural and Forestry; 3 = Construction; 4 = Marine; 5 = Industrial - Process Control - Stationary (Gen-Sets) 6 = Reserved for SAE 7 = Reserved for SAE | | |
| | DF52 Bit field | bit(n) | <i>Range:</i> | Variable | <i>Resolution:</i> | 1 | Used to construct bit fields |
| When Field 2 (PGN number) contains a non-proprietary PGN number, this field is not included in the message. | | | | | | | |
| 6 | Unique ID | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD005 Generic numeric ID, short | | | | Number of route, waypoint, event, mark, etc. | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | <i>Resolution:</i> | 1 bit | Unit-less number |
| This field links the write fields reply group function with the write fields group function. | | | | | | | |
| 7 | Number of Selection Pairs | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD006 Generic counter, short | | | | Numeric count, event counter, sequence counter | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | <i>Resolution:</i> | 1 bit | Unit-less number |
| 8 | Number of Parameter Pairs to be Written | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD006 Generic counter, short | | | | Numeric count, event counter, sequence counter | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | <i>Resolution:</i> | 1 bit | Unit-less number |
| 9 | Field Number of First Selection Pair | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD005 Generic numeric ID, short | | | | Number of route, waypoint, event, mark, etc. | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | <i>Resolution:</i> | 1 bit | Unit-less number |
| 10 | Field Value of First Selection Pair | | | <i>Byte Field Size:</i> | ? | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD000 Undefined | | | | Application specific, defined at time of use | | |
| | DF00 Undefined | Undefined | <i>Range:</i> | undefined | <i>Resolution:</i> | undefined | Application specific, defined at time of use. |
| 11 | Variable Number of fields, field 9 repeated | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD005 Generic numeric ID, short | | | | Number of route, waypoint, event, mark, etc. | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | <i>Resolution:</i> | 1 bit | Unit-less number |

NMEA - Write Fields - group function

PGN: 126208

hex: 1ED00

| | | | | | | |
|--|---|--|------------------------------|--|---------------------------|----------|
| 12 | Variable Number of Fields, field 10 repeated | | | <i>Byte Field Size:</i> <input style="border: 1px solid black; width: 50px;" type="text" value="?"/> | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | <i>Command Parameter:</i> | Optional |
| DD000 Undefined | | Application specific, defined at time of use | | | | |
| DF00 Undefined | Undefined | <i>Range:</i> undefined | <i>Resolution:</i> undefined | Application specific, defined at time of use. | | |
| 13 | Field Number of First Parameter Pair to be Written | | | <i>Byte Field Size:</i> <input style="border: 1px solid black; width: 50px;" type="text" value="1"/> | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | <i>Command Parameter:</i> | Optional |
| DD005 Generic numeric ID, short | | Number of route, waypoint, event, mark, etc. | | | | |
| DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> 0 to 252 | <i>Resolution:</i> 1 bit | Unit-less number | | |
| 14 | Field Value of First Parameter Pair to be Written | | | <i>Byte Field Size:</i> <input style="border: 1px solid black; width: 50px;" type="text" value="?"/> | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | <i>Command Parameter:</i> | Optional |
| DD000 Undefined | | Application specific, defined at time of use | | | | |
| DF00 Undefined | Undefined | <i>Range:</i> undefined | <i>Resolution:</i> undefined | Application specific, defined at time of use. | | |
| 15 | Variable Number of Fields, field 13 repeated | | | <i>Byte Field Size:</i> <input style="border: 1px solid black; width: 50px;" type="text" value="1"/> | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | <i>Command Parameter:</i> | Optional |
| DD005 Generic numeric ID, short | | Number of route, waypoint, event, mark, etc. | | | | |
| DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> 0 to 252 | <i>Resolution:</i> 1 bit | Unit-less number | | |
| 16 | Variable Number of Fields, field 14 repeated | | | <i>Byte Field Size:</i> <input style="border: 1px solid black; width: 50px;" type="text" value="?"/> | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | <i>Command Parameter:</i> | Optional |
| DD000 Undefined | | Application specific, defined at time of use | | | | |
| DF00 Undefined | Undefined | <i>Range:</i> undefined | <i>Resolution:</i> undefined | Application specific, defined at time of use. | | |

NMEA - Write Fields Reply - group function

PGN: 126208

hex: 1ED00

The Write Fields Reply Group Function is a reply to the Write Fields Group Function.

When the Write Fields Group Function is received, if the receiver can comply, the Write Fields Reply Group Function will be transmitted with the resulting values. If a parameter value is accepted then the modified value will be returned. If a parameter value is not accepted, the original value will be returned.

Single Frame: No Priority Default: 3 Default Update Rate: 0 milliseconds Frequency: NA cycles per second

Destination: Address Query Support: Optional Command Support: Optional ACK Rqmnts: None

Field # Field Name Original Reference ID # 194

1 Complex Request Group Function Code Byte Field Size: 1 Request Parameter: Optional
Bit Field Size: Command Parameter: Optional

DD144 Group Function, Request/Command/Acknowledge 0 = Request Message,
1 = Command Message,
2 = Acknowledge Message,
3 = Read Fields,
4 = Read Fields Reply,
5 = Write Fields,
6 = Write Fields Reply

DF53 Integer, 8 bit unsigned uint8 Range: 0 to 252 Resolution: 1 bit Unit-less number

This is the Write Fields Reply message, set = 0x06

2 PGN Number Byte Field Size: Request Parameter: Optional
Bit Field Size: 24 Command Parameter: Optional

DD009 PGN 24-bit Parameter Group Number (PGN) expressed in binary, LSB is transmitted first

DF52 Bit field bit(n) Range: Variable Resolution: 1 Used to construct bit fields

3 Manufacturer's Code Byte Field Size: Request Parameter: Optional
Bit Field Size: 11 Command Parameter: Optional

DD172 NMEA Manufacturer Code Assigned by NMEA Committee

DF52 Bit field bit(n) Range: Variable Resolution: 1 Used to construct bit fields

When Field 2 (PGN number) contains a non-proprietary PGN number, this field is not included in the message.

4 NMEA Reserved Byte Field Size: Request Parameter:
Bit Field Size: resv 2 Command Parameter:

DD001 Reserved field Variable number of reserved bits, all set to logic "1"

DF52 Bit field bit(n) Range: Variable Resolution: 1 Used to construct bit fields

When Field 2 (PGN number) contains a non-proprietary PGN number, this field is not included in the message.

NMEA - Write Fields Reply - group function

PGN: 126208

hex: 1ED00

| | | | | | | | |
|---|--|------------------|---------------|-------------------------|---|---------------------------|---|
| 5 | Industry Group | | | <i>Byte Field Size:</i> | | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | 3 | <i>Command Parameter:</i> | Optional |
| | DD168 Industry Group | | | | 0 = Global; 1 = On-Highway; 2 = Agricultural and Forestry; 3 = Construction; 4 = Marine; 5 = Industrial - Process Control - Stationary (Gen-Sets) 6 = Reserved for SAE 7 = Reserved for SAE | | |
| | DF52 Bit field | bit(n) | <i>Range:</i> | Variable | | <i>Resolution:</i> | 1 Used to construct bit fields |
| When Field 2 (PGN number) contains a non-proprietary PGN number, this field is not included in the message. | | | | | | | |
| 6 | Unique ID | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD005 Generic numeric ID, short | | | | Number of route, waypoint, event, mark, etc. | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | | <i>Resolution:</i> | 1 bit Unit-less number |
| This field links the write fields group function with the write fields reply group function. | | | | | | | |
| 7 | Number of Selection Pairs | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD006 Generic counter, short | | | | Numeric count, event counter, sequence counter | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | | <i>Resolution:</i> | 1 bit Unit-less number |
| 8 | Number of Parameter Pairs to be Written | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD006 Generic counter, short | | | | Numeric count, event counter, sequence counter | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | | <i>Resolution:</i> | 1 bit Unit-less number |
| 9 | Field Number of First Selection Pair | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD005 Generic numeric ID, short | | | | Number of route, waypoint, event, mark, etc. | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | | <i>Resolution:</i> | 1 bit Unit-less number |
| 10 | Field Value of First Selection Pair | | | <i>Byte Field Size:</i> | ? | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD000 Undefined | | | | Application specific, defined at time of use | | |
| | DF00 Undefined | Undefined | <i>Range:</i> | undefined | | <i>Resolution:</i> | undefined Application specific, defined at time of use. |
| 11 | Variable Number of fields, field 9 repeated | | | <i>Byte Field Size:</i> | 1 | <i>Request Parameter</i> | Optional |
| | | | | <i>Bit Field Size:</i> | | <i>Command Parameter:</i> | Optional |
| | DD005 Generic numeric ID, short | | | | Number of route, waypoint, event, mark, etc. | | |
| | DF53 Integer, 8 bit unsigned | uint8 | <i>Range:</i> | 0 to 252 | | <i>Resolution:</i> | 1 bit Unit-less number |

NMEA - Write Fields Reply - group function

PGN: 126208

hex: 1ED00

| | | | | | |
|--|---|--|---|------------------------------|---|
| 12 | Variable Number of Fields, field 10 repeated | | <i>Byte Field Size:</i> <input style="width: 50px;" type="text" value="?"/> | <i>Request Parameter</i> | Optional |
| | | | <i>Bit Field Size:</i> | <i>Command Parameter:</i> | Optional |
| DD000 Undefined | | Application specific, defined at time of use | | | |
| DF00 | Undefined | Undefined | <i>Range:</i> undefined | <i>Resolution:</i> undefined | Application specific, defined at time of use. |
| 13 | Field Number of First Parameter Pair to be Written | | <i>Byte Field Size:</i> <input style="width: 50px;" type="text" value="1"/> | <i>Request Parameter</i> | Optional |
| | | | <i>Bit Field Size:</i> | <i>Command Parameter:</i> | Optional |
| DD005 Generic numeric ID, short | | Number of route, waypoint, event, mark, etc. | | | |
| DF53 | Integer, 8 bit unsigned | uint8 | <i>Range:</i> 0 to 252 | <i>Resolution:</i> 1 bit | Unit-less number |
| 14 | Field Value of First Parameter Pair to be Written | | <i>Byte Field Size:</i> <input style="width: 50px;" type="text" value="?"/> | <i>Request Parameter</i> | Optional |
| | | | <i>Bit Field Size:</i> | <i>Command Parameter:</i> | Optional |
| DD000 Undefined | | Application specific, defined at time of use | | | |
| DF00 | Undefined | Undefined | <i>Range:</i> undefined | <i>Resolution:</i> undefined | Application specific, defined at time of use. |
| 15 | Variable Number of Fields, field 13 repeated | | <i>Byte Field Size:</i> <input style="width: 50px;" type="text" value="1"/> | <i>Request Parameter</i> | Optional |
| | | | <i>Bit Field Size:</i> | <i>Command Parameter:</i> | Optional |
| DD005 Generic numeric ID, short | | Number of route, waypoint, event, mark, etc. | | | |
| DF53 | Integer, 8 bit unsigned | uint8 | <i>Range:</i> 0 to 252 | <i>Resolution:</i> 1 bit | Unit-less number |
| 16 | Variable Number of Fields, field 14 repeated | | <i>Byte Field Size:</i> <input style="width: 50px;" type="text" value="?"/> | <i>Request Parameter</i> | Optional |
| | | | <i>Bit Field Size:</i> | <i>Command Parameter:</i> | Optional |
| DD000 Undefined | | Application specific, defined at time of use | | | |
| DF00 | Undefined | Undefined | <i>Range:</i> undefined | <i>Resolution:</i> undefined | Application specific, defined at time of use. |