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PGS J1939 ISSUE 4

SAE J1939 TECHNICAL INFORMATION

DEVICE PROFILE FOR PENNY AND GILES ENCODERS

Prepared by: 

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Approved by: 

J Witts

Change History

Issue	Date	Change	Author
1	23/04/10	Original	J. Witts
2	08/06/10	Page 3 – Start Position 5.5, Length 1 bits – WAS 2 bits Start Position 5.6 and 5.7 Required for factory setup added.	D Searle
3	16/06/10	Page 1 – PGS J1939 ISSUE 3 SAE J1939 TECHNICAL INFORMATION DEVICE PROFILE FOR PENNY AND GILES ENCODERS WAS – SRH500 J1939 CAN MESSAGE PROTOCOL PGSJ1939 ISSUE 2	M Bentley
4	18/02/14	Page 4 – SPN_PG 1 & SPN_PG 2 updated to specify byte order.	D Searle

PGNs

PGN_PG 65400 SRH520CN Position Sensor PGSRH520CNP

This parameter group is used to transmit dual channel rotary positional information about the SRH520CN sensor.

Transmission Repetition Rate: 25mS / 50mS /100mS (factory configurable)
 Data Length: 5
 Extended Data Page: 0
 Data Page: 0
 PDU Format: 255
 PDU Specific: 120 PGN Supporting Information:
 Default Priority: 3
 Parameter Group Number: 65400 (0x00FF78)

Start Position	Length	Parameter Name	SPN
1-2	2 bytes	Rotary Position Channel 1	1
3-4	2 bytes	Rotary Position Channel 2	2
5.1	2 bits	Channel 1 Status	3
5.3	2 bits	Channel 2 Status	4
5.5	1 bits	SRH520CN Status	5
5.6	}		
5.7	} required for factory setup		

SPNs***SPN_PG 1 Rotary Position Channel 1***

SRH520CN Angle of rotation for channel 1 output.

Data Length: 2 bytes**
Resolution: 0.022* degrees/bit, 0 offset
Data Range: 0 to 1440 degrees Operational Range: 0 to 360 degrees
Type: Measured
Supporting Information:
PGN reference: 65400
Note:

* 360 degrees using least significant 14 bits

** Position data is transmitted in MOTOROLA format (i.e. most significant byte first)

SPN_PG 2 Rotary Position Channel 2

SRH520CN Angle of rotation for channel 2 output.

Data Length: 2 bytes**
Resolution: 0.022* degrees/bit, 0 offset
Data Range: 0 to 1440 degrees Operational Range: 0 to 360 degrees
Type: Measured
Supporting Information:
PGN reference: 65400
Note:

* 360 degrees using least significant 14 bits

** Position data is transmitted in MOTOROLA format (i.e. most significant byte first)

SPN_PG 3 Channel 1 Status

SRH520CN status signal which indicates the status of channel 1.

00 – Disabled
01 – Enabled / Normal Operation
10 – Error
11 – Not Available

Data Length: 2 bits
Resolution: 4 states/2 bit, 0 offset
Data Range: 0 to 3 Operational Range: same as data range
Type: Measured
Supporting Information:
PGN reference: 65400

SPN_PG 4 Channel 2 Status

SRH520CN status signal which indicates the status of channel 2.

- 00 – Disabled
- 01 – Enabled / Normal Operation
- 10 – Error
- 11 – Not Available

Data Length:	2 bits	
Resolution:	4 states/2 bit, 0 offset	
Data Range:	0 to 3	Operational Range: same as data range
Type:	Measured	
Supporting Information:		
PGN reference:	65400	

SPN_PG 5 SRH-500 Status

SRH520CN status signal which indicates the status of the device.

- 00 – Disabled
- 01 – Enabled / Normal Operation
- 10 – Error
- 11 – Not Available

Data Length:	2 bits	
Resolution:	4 states/2 bit, 0 offset	
Data Range:	0 to 3	Operational Range: same as data range
Type:	Measured	
Supporting Information:		
PGN reference:	65400	