



# Connnextgen

## Trailer module





## Technical Data

Construction	Plastic housing with external mounting brackets
Connector	24-pin Tyco JPT
Housing Dimensions	65 x 95 x 35 mm
Weight	130g
Ambient Temperature	- 40°C to 85°C
Protection Class	IP54
Operating Voltage $U_B$	9 - 15 V DC
	Protection against reverse polarity and electrical transients. The module has two operating voltage pins
Current Consumption	< 1mA
Protection	20A

## Processor

Manufacturer	Freescale
Processor Type	HCS08AW16A
Clock Frequency	~17 MHz
Flash	16 K
Ram	1 K

## Interfaces

### Proprietary Interface

Ability to read diagnostic counter and process firmware updates

## Technical Examination

E13 approval number	10R-0413193
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## Possible Inputs and Outputs

Digital Inputs	7
Digital Outputs	8
Relay Output	1
Internal Buzzer	

## Technical data inputs and outputs

<b>Characteristics of Digital Inputs</b>	<b>standard</b>
Input Voltage	0 V... $U_B$
Start-Up level	6 V
Shut-Off level	4 V
Input Resistance	68 k $\Omega$
Input Frequency	Up to 1000 Hz
Other	PWM compatible

### Characteristics of Digital Outputs

Load Current	2,5 A/channel
Overload Capability	5A electronic protected
Diagnostic Capability	

Datasheet  
Connnextgen

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## Programming

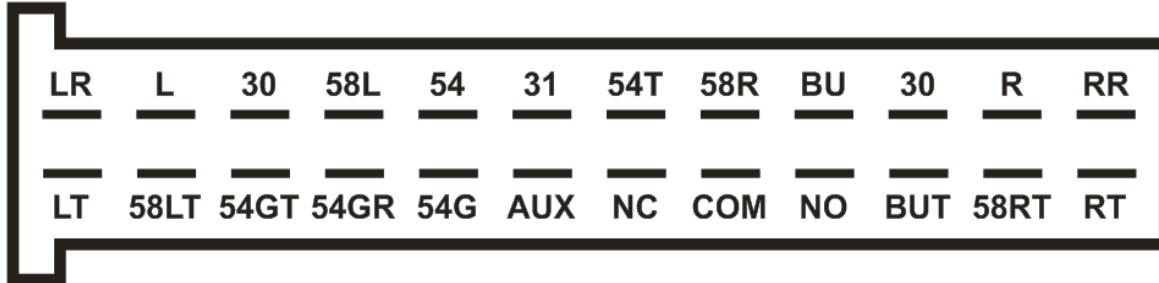
Interface	Proprietary
Software	Customizable via MRS Electronic

## Connection Assignment

Pin	Type	Group	Description	Clamp	Max. Power
1	OUTPUT	Car Output	Indicator left	LR	
2	HSD	Trailer Output	Indicator left	LT	42W 50%
3	INPUT	Car Input	Indicator left	L	
4	HSD	Trailer Output	Tail light left	58LT	42W
5	POWER		Supply	30	
6	HSD	Trailer Output	Fog light	54GT	42W
7	INPUT	Car Input	Tail light left	58L	
8	Relay	Car Output	Fog light	54GR	
9	INPUT	Car Input	Brake light	54	
10	INPUT	Car Input	Fog light	54G	
11	POWER		Ground	31	
12	OUTPUT		External relay	AUX	
13	HSD	Trailer Output	Brake light	54T	84W
14	Relay		Park distance control	NC	
15	INPUT	Car Input	Tail light right	58R	
16	Relay		Park distance control in	COM	
17	INPUT	Car Input	Reversing light	BU	
18	Relay		Park distance control	NO	
19	POWER		Supply	30	
20	HSD	Trailer Output	Reversing light	BUT	42W
21	INPUT	Car Input	Indicator right	R	
22	HSD	Trailer Output	Tail light right	58RT	42W
23	OUTPUT	Car Output	Indicator right	RR	
24	HSD	Trailer Output	Indicator right	RT	42W 50%



## Connection Assignment



## Special features

### Tail Light/Brake Light:

The trailer module supports vehicles with combined rear and brake light.

Note: The parking light function can only be activated if the brake light channel is not activated.

### Reverse Light/Park Distance Control Relay:

If the reverse light is activated, the park distance control relay is activated as well.

### Rear Fog Light:

If the input in the rear fog light is activated, a changeover is made to the trailer output when a corresponding load is present there.

### Indicator/C2 Function/Buzzer:

To use the C2 function with frequency doubling, the turn signal circuit must be split to the taillights. The signal from the vehicle must be connected to L/R and the indicator light is connected to LR/RR.

If a lamp end defect is detected on the trailer, a failure of the vehicle indicator lights is simulated by the trailer control unit and the vehicle control unit activates the frequency doubling. Optionally internal buzzer is controlled.

If both inputs are active (warning flashes), the C2 function is deactivated.

## Order Information

Designation	Order Number
Connnextgen	1.056.100.00