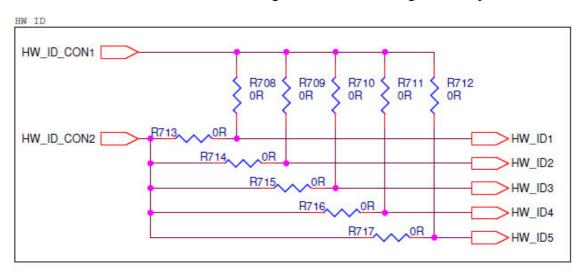


# Family approval of ME501

M-Tec Trackunit A/S declare that the ME501-x where x = [1...13] manufactured variants out of 63 possible variants are all constructed identically in relation to the test performed on a selected worst case variant ME501-5 with respect to the FCC and IC rules.

The variant configuration determine the I/O configuration of the particular ME501-x variant based on 0 ohm resistor configuration that opens/close the various I/O configuration of the device. The software for the different variants is the same and the software will enable the features according to the resistor configuration input.



The resistor configuration determines the HW version and the HW revision for the specific identification of a variant.

	27 7	ersim	Confi	ouzabi		
	3.768	3.765	3716	3,710	3,714	
501-0	3721	3714	3781	300	500	376
501-1	23.	314	3781	300	500	376
501-2	3714	23.	3719	370	3704	374
501-8	23.	63.	378	378	3784	378
601 4	3789	379.0	270	370	3788	376
501-5	23.	374	23.	704	1.14	278
501-6	3714	43.	473	378	578	37/4
501-7	23.	23.	23.	378	378	374
501-5	3714	304	3714	23	370	276
001-8	3781	23.	3700	23	3504	2761
501-10	3714	3714	23.	23	704	276
501-11	3714	23.	23.	23	7,714	376
501-12	378	304	2/14	NP.	23.	374
501-13	23.	304	2/14	NP.	23.	374
601 14	3786	378.6	270	3581	63.	27:0
501-15	27.	374	23.	NP.	27.	376
501-16	37M	374	3714	27	22	774
501-17	3714	304	23.	23	63.	276
501-18	3714	3714	3719	300	704	(R
601 10	630	378.9	3789	372	3784	(3)
501-20	3714	23.	2/14	MM	370	17.
501-21	23.	23.	3714	NP.	370	17.
501-22	3714	374	3714	23	370	17.
501-59	378	22	201	47	7.04	17.
501-24	3764	304	3764	3704	43.	(3)
501-25	23.	374	250	NM.	23.	17.
501-26	3714	504	2011	23	23.	63.

	sicz C			
EW Rem	3711	R712	3716	3717
2	3714	378	5714	374
1	23.	378	3714	374
2	574	22	3714	374
8	23	23	504	314
ą.	574	378	22.	374
5	574	22	22.	374
E	3/14	372	3714	23.
7	22	378	37M	-27
2	514	378	22.	43.
_				

For cost saving reasons the disabled I/O interfaces in each variant are not mounted on the baseband PCB. The GSM/WCDMA module is unaffected by the applied I/O configuration changes in each variant.



The interface cable is the same in all variants and it contains 8 wires configured for a particular application at the end customer.

None of the variant configurations will have any influence on the Radio spectrum, EMC and safety performance of the device with respect to CFR47 rules part 15, part 22 and part 24 as well as IC rules RSP100e Issue 9, section 5.2

On the following pages the discrete components and/or bus driver components mounting differences are described in details with reference to the I/O configuration.

#### **Tested reference variant**

## ME501-5

The tested ME501-5 variant configuration according to the parts list (**ME501-5 Parts** list.pdf and **ME501 variant configuration parts list.pdf**) enables the following options and I/O configurations:

- Option GPS installed
- CAN bus interface
- 1-wire interface
- RS232 interface
- 4 inputs and 1 output
- Large flash memory (1 MB)

The variant parts list structure is shown graphically in the **ME501 family variant system.pdf.** 

The SIM card interface in the ME501 tracking devices is not variant specific. The SIM card interface can be configured in three different solutions dependent on the customer requirements i.e. selection of either a 1 SIM interface, a 2 SIM interface or an E-SIM interface.

The ME501 family is prepared for future customer requirements by having an I/O board extension and a special low power configuration mode. These options are currently not utilized in the defined variants and are listed as not mounted in **ME501 family variant system.pdf.** 



## The variant difference for ME501-1 through ME501-13.

## ME501-1

To configure the device for variant ME501-1 that consists of the following options and I/O configurations

- Option GPS installed
- 1-wire interface
- 2 inputs and 1 output
- Small flash memory (0.5 MB)

The following parts list (**ME501 variant configuration parts list.pdf**) are changed from ME501-5 to ME501-1 (NM = Not Mounted):

- CAN bus interface parts 7500.1004NM
- RS232 interface parts 7500.1005NM
- I/O port parts list 7500 .1006B (Mounted)

#### ME501-2

To configure the device for variant ME501-2 that consists of the following options and I/O configurations

- Option GPS installed
- 1-wire interface
- 4 inputs and 1 output
- Large flash memory (1.0 MB)

The following parts list (**ME501 variant configuration parts list.pdf**) are changed from ME501-5 to ME501-2 1 (NM = Not Mounted):

- CAN bus interface parts 7500.1004NM
- RS232 interface parts 7500.1005NM



To configure the device for variant ME501-3 that consists of the following options and I/O configurations

- Option GPS installed
- 4 inputs and 1 output
- CAN bus interface
- Large flash memory (1.0 MB)

The following parts list (**ME501 variant configuration parts list.pdf**) are changed from ME501-5 to ME501-3 (NM = Not Mounted):

- 1-wire bus interface parts 7500.1003NM
- RS232 interface parts 7500.1005NM

## ME501-4

To configure the device for variant ME501-4 that consists of the following options and I/O configurations

- Option GPS installed
- 4 inputs and 1 output
- CAN bus interface
- 1-wire interface
- Large flash memory (1.0 MB)

The following parts list (**ME501 variant configuration parts list.pdf**) are changed from ME501-5 to ME501-4 (NM = Not Mounted):

• RS232 interface parts 7500.1005NM



To configure the device for variant ME501-6 that consists of the following options and I/O configurations

- Option GPS installed
- 4 inputs and 1 output
- 1-wire interface
- RS232 interface
- Large flash memory (1.0 MB)

The following parts list (**ME501 variant configuration parts list.pdf**) are changed from ME501-5 to ME501-6 (NM = Not Mounted):

CAN bus interface parts 7500.1004NM

#### ME501-7

To configure the device for variant ME501-7 that consists of the following options and I/O configurations

- Option GPS installed
- 2 inputs and 1 output
- CAN bus interface
- 1- wire interface
- Large flash memory (1.0 MB)

The following parts list (**ME501 variant configuration parts list.pdf**) are changed from ME501-5 to ME501-7 (NM = Not Mounted):

- RS232 interface parts 7500.1005NM
- I/O port parts list 7500 .1006B (Mounted)



To configure the device for variant ME501-8 that consists of the following options and I/O configurations

- Option GPS not installed
- 2 inputs and 1 output
- 1-Wire interface
- RS232 bus interface
- Large flash memory (1.0 MB)

The following parts list (**ME501 variant configuration parts list.pdf**) are changed from ME501-5 to ME501-8 7 (NM = Not Mounted):

- CAN bus interface parts 7500.1004NM
- I/O port parts list 7500 .1006B (Mounted)

## ME501-9

To configure the device for variant ME501-9 that consists of the following options and I/O configurations

- Option GPS installed
- 4 inputs and 1 output
- Small flash memory (0.5 MB)

The following parts list (**ME501 variant configuration parts list.pdf**) are changed from ME501-5 to ME501-9 (NM = Not Mounted):

- CAN bus interface parts 7500.1004NM
- RS232 interface parts 7500.1005NM
- 1-wire bus interface parts 7500.1003NM



To configure the device for variant ME501-10 that consists of the following options and I/O configurations

- Option GPS installed
- 2 inputs and 1 output
- Large flash memory (1.0 MB)

The following parts list (**ME501 variant configuration parts list.pdf**) are changed from ME501-5 to ME501-10 (NM = Not Mounted):

- CAN bus interface parts 7500.1004NM
- RS232 interface parts 7500.1005NM
- 1-wire bus interface parts 7500.1003NM
- I/O port parts list 7500 .1006B (Mounted)

## ME501-11

To configure the device for variant ME501-11 that consists of the following options and I/O configurations

- Option GPS installed
- 2 inputs and 1 output
- CAN bus interface
- Large flash memory (1.0 MB)

The following parts list (**ME501 variant configuration parts list.pdf**) are changed from ME501-5 to ME501-11 (NM = Not Mounted):

- RS232 interface parts 7500.1005NM
- 1-wire bus interface parts 7500.1003NM
- I/O port parts list 7500 .1006B (Mounted)



To configure the device for variant ME501-12 that consists of the following options and I/O configurations

- Option GPS installed
- 2 inputs and 1 output
- Small flash memory (0.5 MB)

The following parts list (**ME501 variant configuration parts list.pdf**) are changed from ME501-5 to ME501-12 (NM = Not Mounted):

- CAN bus interface 7500.1004NM
- RS232 interface parts 7500.1005NM
- 1-wire bus interface parts 7500.1003NM
- I/O port parts list 7500 .1006B (Mounted)

## ME501-13

To configure the device for variant ME501-13 that consists of the following options and I/O configurations

- 4 inputs and 1 output
- Large flash memory (1.0 MB)

The following parts list (**ME501 variant configuration parts list.pdf**) are changed from ME501-5 to ME501-13 (NM = Not Mounted):

- Option GPS parts 7500.1002NM
- CAN bus interface 7500.1004NM
- RS232 interface parts 7500.1005NM
- 1-wire bus interface parts 7500.1003NM