



Communication concerning the approval of a type of electrical/electronic sub-assembly with regard to Regulation No. 10

Approval number:	05283 Extension 2
Reason for extension	Renewed information document New articles added
1. Make:	Mobitec, Lawo, Gorba
2. Type and general commercial description: For details see information document.	Mobitec MobiSTOP Ultima MobiLED Compact Ultima Lawo Futura iLED Lawo Futura Flex Lawo Futura Mini Gorba imotion LED mini Gorba imotion LED mini-remote
3. Means of identification of type, if marked on the component:	Type identification on the label
3.1. Location of that marking:	Back of the unit
4. Category of vehicle:	N/A
5. Name and address of manufacturer:	Mobitec AB Box 97 SE-524 21 Herrljunga
6. Location and method of affixing of the approval mark:	Printed on label described in item 3.1.
7. Address(es) of assembly plant(s):	LTG Warehouse LAWO Informationssysteme GmbH Poland ul. Sikorskiego 2 83-000 Pruszcz Gdanski POLAND
8. Additional information (if any):	See appendix
9. Technical service responsible for carrying out the tests:	SP-Technical Research Institute of Sweden Box 857 SE-501 15 Borås
10. Date of test reports:	See item 16
11. No. of test report:	See item 16
12. Remarks (if any):	

13. Place: Borlänge
14. Date: 2017-09-26
15. Signature:



Lars Rask



16. The index to the information package lodged with the Approval Authority, which may be obtained on request, is attached:

- Information document 03486-R6 Tillverkarintyg MobiSTOP Ultima, dated 2017-09-13.
- Test report : 5P08324C dated 2015-11-24
- Test report: 6P04068A, dated 2016-05-24
- Test report: 6P04068B, dated 2016-05-24
- Test report: 6P04068C, dated 2016-05-24
- Test report: 6P06742A, dated 2016-09-13
- Test report: 6P06742B, dated 2016-09-15
- Test report: 6P06742C, dated 2016-09-13

- 17.

Appendix to extended type-approval communication form
No. 05283 Extension 1 concerning the type approval of an
electric/electronic sub-assembly under regulation No. 10

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|--------|---|--|
| 1. | Additional information: | See test reports |
| 1.1. | Electrical system rated voltage: | 12 /24 V DC, negative ground |
| 1.2. | This ESA can be used on any vehicle type with the following restrictions: | N/A |
| 1.2.1. | Installation conditions if any: | N/A |
| 1.3. | This ESA can be used only on the following vehicle types: | N/A |
| 1.3.1. | Installation conditions if any: | N/A |
| 1.4. | The specific test methods used and the frequency ranges covered to determine immunity were: (annex 9) | ISO 11452-2 and ISO 11452-4
20-200 MHz
200-800 MHz
800-2000 MHz |

1.5. Laboratory accredited to ISO 17025 and recognized by the Approval Authority responsible for carrying out the tests: See item 9

2. Remarks:

List of Drive and Filter boards:

Drive board:	Communication:	Format
091549	RS485/IBIS	Low
091556	RS485/IBIS	High
091555	Bluetooth	Low
091557	Bluetooth	High
091551	Ethernet	Low

Filter board: Communication:

010112	RS485/IBIS/Bluetooth
010111	Ethernet

List of approved signs

Lawo A/W = amber or white

Gorba 0/1 = amber or white

Mobitec B/F = amber or white

LAWO Article number (A/W)	Mobitec Article number (B/F)	Gorba Article number (0/1)	Resolution	Communication
n/a	N?1010100	31.96.70.00.1	16x144	IBIS / RS485
IEF?1640144.0	N?1010100	31.96.71.00.1	16x144	RS485
IEF?1640144.0	N?1010100	31.96.72.00.1	16x144	IBIS
IEF?1640144.5	N?1010100	31.96.73.00.1	16x144	RS485
IEF?1640144.5	N?1010100	31.96.77.00.1	16x144	IBIS
IEF?1640144.5	N?1010100	31.96.76.00.1	16x144	RS485
IEF?1640144.5	N?1010100	31.96.72.00.1	16x144	IBIS
IEF?1640144.5	N?1010100	31.96.73.00.1	16x144	RS485
IEF?1640144.0	N?1010100	31.96.73.00.1	16x144	RS485
n/a	N?1020102	31.96.70.00.2	16x144+48	IBIS / RS485
n/a	N?1020102	n/a	16x144+48	RS485
MAEZM?16112.7D	N?1040100	31.96.70.00.4	16x112	IBIS / RS485
IEF?1676112.0	N?1040100	31.96.71.00.4	16x112	RS485
n/a	N?1050100	31.96.70.00.5	16x96	IBIS / RS485
IEF?1640096.0	N?1050100	31.96.71.00.5	16x96	RS485
IEF?1640096.1	N?1050100	31.96.71.00.5	16x96	RS485
n/a	N?1040400	n/a	16x112	Bluetooth
MAEZB?16144.7C	N?1010400	31.96.74.00.1	16x144	Bluetooth
MAEZB?16112.7D	N?1040400	31.96.74.00.4	16x112	Bluetooth
n/a	N?1010400	n/a	16x144	Bluetooth
MAEZB?16112.7D	N?1040400	31.96.74.00.4	16x112	Bluetooth
MAEZB?16144.7C	N?1010400	31.96.74.00.1	16x144	Bluetooth
n/a	N?1010100	31.96.71.00.1	16x144	RS485
n/a	N?1040100	31.96.71.00.4	16x112	RS485
n/a	N?1030100	31.96.01.00.3	16x48	IBIS / RS485
MAEZB?16096.7C	N?1050400	31.96.74.00.5	16x96	Bluetooth
n/a	N?1050100	31.96.71.00.5	16x96	RS485
IEF?1640144.0	N?1020102	31.96.72.00.2	16x144+48	IBIS
MAEZM?16144.7C	N?1010100	31.96.73.00.1	16x144	RS485
MAEZM?16144.AC	N?1010300	31.96.78.00.1	16x144	Ethernet
n/a	N?1020301	n/a	16x144+48	Ethernet
MAEZB?16056.7C	N?1060400	31.96.74.00.6	16x56	Bluetooth
n/a	N?1060100	31.96.71.00.6	16x56	RS485
MAEZM?16112.7C	NB1040100	31.96.73.00.4	16x112	RS485
IEF?1640144.5	N?1010100	31.96.77.00.1	16x144	IBIS
IEF?1640144.5	N?1010100	31.96.76.00.1	16x144	RS485

IEF?1640096.5	N?1050100	31.96.?2.00.5	16x96	IBIS
IEF?1640144.5	N?1020102	31.96.?6.00.2	16x144+48	RS485
IEF?1640144.5	N?1020102	31.96.?7.00.2	16x144+48	IBIS
IEF?1640144.5	N?1020102	31.96.?3.00.2	16x144+48	IBIS

Tillägg 2: Mätningar / Appendix 2: Measurements

Mätningar är genomförda enligt bifogade rapporter.

Measurements are done accordingly to attached test reports.

Test report: Tested sign:

5P08324C	NF1020301
6P04068A	NB1010100
6P04068B	NB1010400
6P04068C	NF1010100
6P06742A	NF1040400
6P06742B	NB1040400
6P06742C	NB1040100