



# spectrum 2

The multi-talented with first-class spectrum quality.



Scale 1:2

**Quality in Control.**

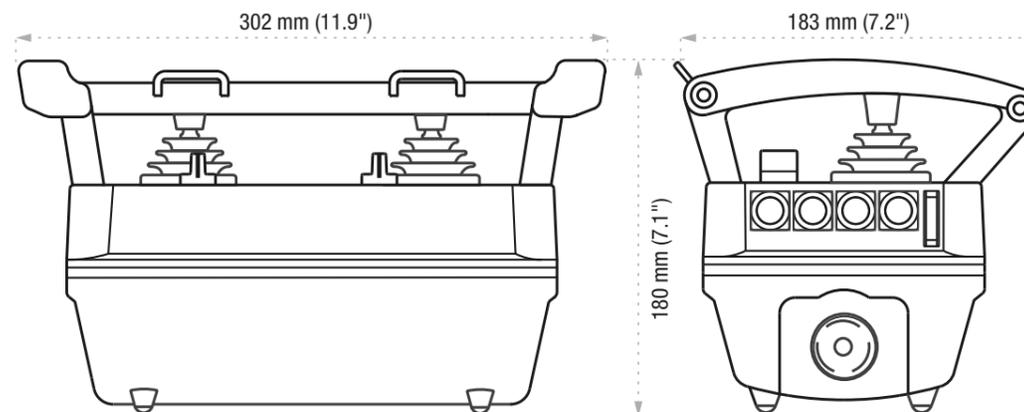


# spectrum 2

## Technical data

<b>Radio transmitter</b>	spectrum 2		
<b>Combined with</b>	FSE 319 / 507 / 510 / 516 / 524, FSE 726 / 727 / 736 / 737 / 776 / 777 radiobus®		
<b>Control concepts</b>	Point-to-point operation, catch-release, combined operation (tandem, trio, quattro), pre-selection of trolley / hoist; cable option		
<b>Operating elements</b>	Up to 3 joysticks or up to 6 linear levers; combination of push buttons, toggle switches, rotary switches (maintained / spring- return) and other operating elements; a total of 8 one-step push buttons on the sides; <i>optional</i> : joysticks with integrated button; z-axis switches for the simultaneous control of 3 drives		
<b>Control functions</b>	Up to 32 control functions (on / off); up to 8 analog functions for joysticks / linear levers; up to 4 additional analog functions, e. g. for potentiometer switches; number of control functions expandable by radiobus® modules		
<b>Indication</b>	LED / acoustic signal / transmitter vibration: operating status, battery status		
<b>Safety</b>	E-STOP: PL d category 3 according to EN ISO 13849-1:2015 Protection from unauthorized use: activation via HBC start-up sequence or merlin® TUC Auto Power Off: automatic deactivation of the transmitter after 15 min without command input Auto Movement Off: automatic deactivation of movement functions after 5 min without command input		
<b>Enhanced safety functions</b>	radiomatic® shock-off / zero-g / inclination switch; <i>optional</i> : access control with merlin® TUC, radiomatic® infrakey, micro / orthogonal drive, two-step enabling switch, radiomatic® touch-to-activate, front panel lighting, flashlight, shut-down on implausible control commands		
<b>Feedback to the operator</b>	Information and warnings via 16 LEDs and / or transmitter vibration; number of LEDs expandable by radiobus® modules		
<b>Service concept</b>	radiomatic® iLOG, radiomatic® ADCON, merlin® TMC (Teach Mode Card) for teaching of hydraulic functions		
<b>Frequency ranges</b>	<b>ISM bands</b>	<b>Channel spacing</b>	<b>Radiated power</b>
	country-specific use: 405 – 475 MHz 865 – 870 MHz 902 – 928 MHz	12.5 / 25 kHz 25 kHz 25 kHz	max. 10 mW
	country-independent use: 2.4 GHz: 2402 – 2480 MHz	1 MHz	max. 100 mW
	country-specific use: DECT: 1790 – 1930 MHz	1.728 MHz	max. 250 mW
<b>Frequency management</b>	Manual frequency switch, radiomatic® AFS, Adaptive Frequency Hopping, DECT		
<b>Antenna</b>	Internal		
<b>Battery technology</b>	Rechargeable Li-ion exchange battery; <i>optional</i> : capacity gauge via LEDs; continuous operating time: typically 40 hours		
<b>Charging time</b>	< 6 h (typ.)		
<b>Housing material</b>	Plastic (PA6GF30)		
<b>Dimensions / weight</b>	180 x 302 x 183 mm (7.1" x 11.9" x 7.2") / approx. 2 kg (4.4 lb.)		
<b>Operating temperature</b>	-20 °C ... +70 °C (-4 °F ... 158° F)		
<b>Protection class</b>	IP 65		

© 2019 HBC-radiomatic GmbH | PI\_spectrum\_2 | 13/19 | Specifications and design subject to change without notice! No part of this document may be reproduced in any manner whatsoever without the expressed written permission of HBC-radiomatic GmbH.



# spectrum 2

spectrum 2 is a versatile radio control with HBC joysticks or linear levers as well as numerous further operating elements. A large selection of features and functions allows for individually customized configuration.



## Valuable features at a glance:



### Functionally safe commands

**Enhanced safety functions for particular scenarios**  
Apart from the E-STOP, the radio control is available with further safe commands corresponding to PL d category 3 according to EN 13849-1:2015.



### merlin® TUC (Transmitter User Card)

**Simple and safe management of access rights**  
merlin® TUC protects the control against unauthorized use. In addition, this card allows you to unlock or lock machine functions for each different operator.



### radiomatic® touch-to-activate

**Protection against unintended initiation of commands**  
In order to enable movement commands, the operator has to touch the roll-over bar or the joystick button. This will protect the operator against unintended machine movements.



### Front panel lighting and flashlight

**Clear vision even in the dark**  
These useful features can be conveniently activated at the touch of a button.



Version with linear levers.



E-STOP.



Front view.



High-performing Li-ion exchange batteries, optional with capacity gauge.



radiomatic® iLOG for the quick activation of a spare transmitter.



Carrying with the hip belt.