



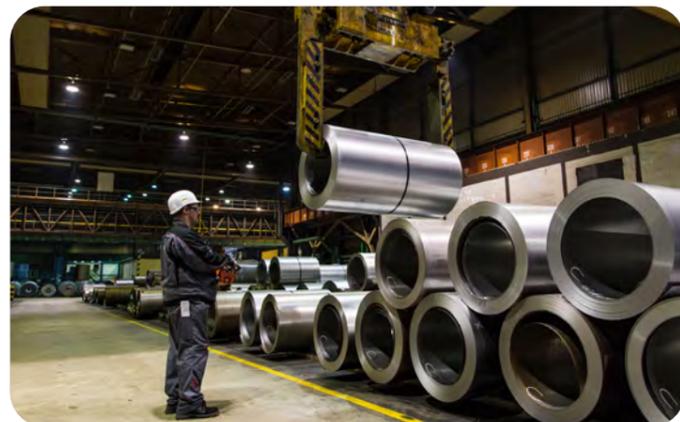
# spectrum S

The compact radio control  
with high-performing 5" color display.



Scale 1:2

**Quality in Control.**



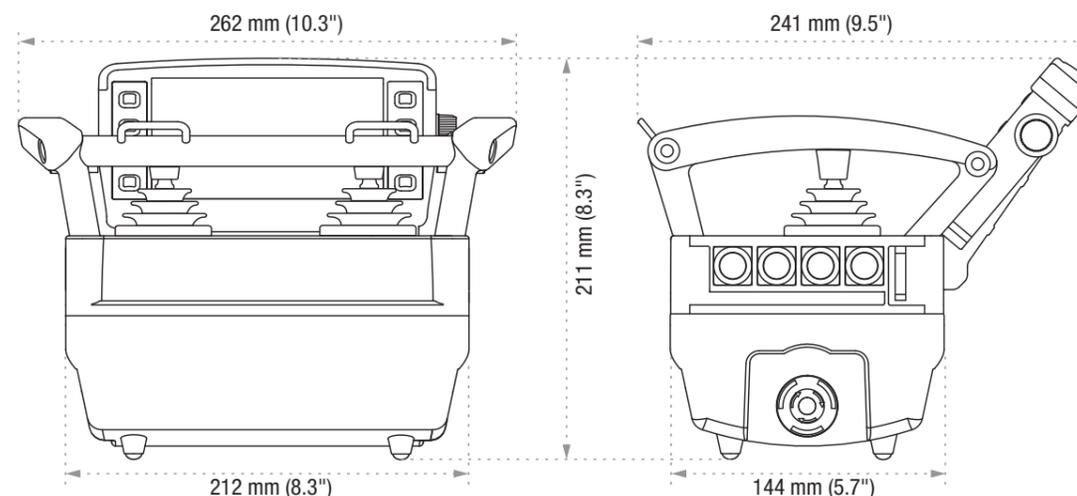
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# spectrum S

## Technical data

<b>Radio transmitter</b>	spectrum S		
<b>Combined with</b>	FSE 510 / 511 / 516 / 524, FSE 726 / 727 / 736 / 737 radiobus®		
<b>Control concepts</b>	Point-to-point operation, catch-release, combined operation (tandem, trio, quattro), hoist / trolley pre-selection; cable option		
<b>Operating elements</b>	Up to 2 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; radiomatic® iCON for display navigation; 8 push buttons located on the sides of the display for navigation and for quick access to pre-defined functions; <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 6 analog functions for joysticks / linear levers; up to 4 additional analog functions, e. g. for potentiometers; number of control functions expandable by radiobus® modules		
<b>Indication</b>	LED / acoustic signal / transmitter vibration / display: 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 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>	Data, information and warnings via 5" color TFT display; 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	12.5 / 25 kHz 25 kHz	max. 10 mW max. 10 mW
	902 – 928 MHz	75 kHz	max. 70 mW
	country-independent use: 2.4 GHz: 2402 – 2480 MHz country-specific use: DECT: 1790 – 1930 MHz	1 MHz 1.728 MHz	max. 100 mW max. 250 mW
<b>Frequency management</b>	Fixed frequency, radiomatic® AFS, radiomatic® AFM, Adaptive Frequency Hopping, DECT		
<b>Antenna</b>	Internal		
<b>Battery technology</b>	Rechargeable Li-ion exchange battery with capacity gauge via LEDs; continuous operating time: typically 13 hours		
<b>Charging time</b>	< 6 h (typ.)		
<b>Housing material</b>	Plastic (PA6 GF30)		
<b>Weight</b>	approx. 2.5 kg (5.5 lb.)		
<b>Operating temperature</b>	-20 °C ... +70 °C (-4 °F ... 158° F)		
<b>Protection class</b>	IP 65		



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# spectrum S

spectrum S is synonymous with high performing radio technology, in a compact format, and with an extra-large color display. This control sets a new standard with its added range of functions. Thanks to its clever display design, the entire surface area of the front panel can be used for the placement of operating elements.

## 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 added 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

#### Intelligent 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 feature protects the operator against unintended machine movements.



### Front panel lighting

#### All information is optimally visible

Built in sensors will activate the integrated front panel lighting if necessary.



Front view



E-STOP



Flashlight



Status bar indicating connection quality, battery status, date and time

Sensors for display brightness and front panel lighting

Integrated edge impact protection

8 buttons and radiomatic® iCON for navigation and activation of softkeys

Entire space can be used for operating elements

## Feedback via 5" color display.

Safety and comfort paired with individual design.

- State-of-the-art TFT technology for first-class performance.
- Clear presentation of an extensive array of data and information via 800 x 480 pixel high resolution 5" display.
- Automatic adjustment of display brightness matched to the environment, integrated front panel lighting and 80° viewing angle from all directions.
- Layout and display elements can be chosen freely.
- Access to HBC's comprehensive library of commonly used symbols, images and graphics for display design.
- Intuitive HBC menu with setting options, warning messages and system information.



High-performing Li-ion exchange batteries with capacity gauge



radiomatic® iLOG for the quick activation of a spare transmitter



Convenient carrying with the hip belt