

# First time at Agritechnica: Digital smart camera and display family by Liebherr with new features

- High range of contrast for detailed camera images
- Customisable display controller family
- Robust HMI components for demanding applications

Nussbaumen (Switzerland), 10 October 2019 - Liebherr presents new features of the MDC3 digital smart camera and the customisable DC5 display family at Agritechnica 2019.

## Digital images: Sharp, colourfast and detailed

The everyday working life of mobile machines is characterised by different light conditions such as direct sunlight or light-shade changes. A powerful camera that is able to reproduce the working environment in detail is, therefore, crucial for work safety.

"Our MDC3 digital smart camera makes the difference, especially in difficult light conditions," explains Alexander Bertsch, Head of the Sensor Technology Product Line at Liebherr-Elektronik GmbH. "Thanks to a sophisticated HDR algorithm and the high range of contrast, the driver retains a clear view even in very dark or extremely bright light conditions. This increases work safety and productivity," says Bertsch.

# Additional functions: High Dynamic Range, lens correction, digital zoom and multicasting

The MDC3 is equipped with High Dynamic Range functionality, a residual light sensitivity of 1 millilux and a contrast range of 132 decibels. Thanks to these features, high-contrast images without overexposure or underexposure in the cabin are a reality. This means that important image details are available even in extremely difficult light conditions.

The lens correction function eliminates the fisheye effect and makes it much easier for the driver to interpret the image – allowing greater comfort and safety at work.

Focus on the essentials: The MDC3's digital zoom allows you to view a desired area. This function is particularly helpful for the detailed observation of work processes.

Multicasting also allows the image to be shown simultaneously on several display devices – a useful function especially for larger machines.

The MDC3 can also be used as an optical image sensor. In addition to the highcontrast live image, the camera also provides edge images and optical flow. These are important components for the implementation of efficiency-increasing assistance systems.

#### Robust team: MDC3 and DC5

The smart camera and the fifth generation of display controllers (DC5), with an i.MX6 processor and the Linux/Yocto software environment, form a visually powerful camera monitor system. The DC5 also brings visual comfort and computing power to the driver's cab. Thanks to the high degree of protection, the MDC3 (IP6K9K) and the DC5 (IP65) are suitable for very demanding operating conditions. These proven solutions provide an optimal basis for customer-specific developments.

Liebherr will be presenting its new camera and display generation from 10<sup>th</sup> to 16<sup>th</sup> November at Agritechnica 2019 (Hall 16, Stand C41).

#### Captions

liebherr-mdc3-dc5-robust-team.jpg First time at Agritechnica: MDC3 digital smart camera and DC5 display controller.

liebherr-mdc3-digital-smart-camera-high-dynamic-range.jpg High-contrast images showing important details thanks to HDR and high range of contrast.

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