



0.05 ... 500 m
 ± 1.5 mm

Steel industry

Crane positioning

Timber industry



DLS-B – the contact less **DISTANCE MEASURING DEVICE**
for millimeter precise measurement in extreme situations



Precise and solid

With our new Laser-Distance Sensors DLS-B you measure absolute distances up to 500 meters. Thanks to state of the art laser technology the DLS-B device measures with a precision of 1.5 millimeters. It represents a cost efficient solution even at extreme environment temperatures as low as -40 °C.



Elevator positioning



Tunneling / Mining



Level measuring



Multiple functions facilitate flexible applications

The DLS-B is an optical measuring device. You can measure, maintenance-free, distances on natural and reflective surfaces. You determine positions on objects difficult to access or with very high surface temperatures. Just as well you can measure distances in an aggressive environment in an easy and accurate way. The possibility of measuring positions on moving objects, to find in high rack storage areas, storage areas for small parts or cranes, is an additional advantage of the DLS-B device.

The DLS-B is designed and suitable for applications in the heavy industries and outdoor. It disposes of a solid metal case and complies with protection class IP65. An optional heater allows reliable measuring at extremely low environment temperatures.

Easy integration

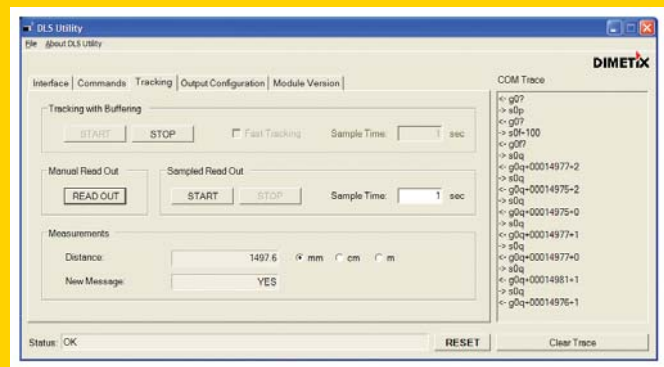
Serial, analog and digital interfaces are standard features for the complete DLS-B product line. This enables you to easily connect the DLS-B to a control system (SPS, IPC or PC).

Is a superior controller to expensive for your application? Your DLS-B device runs in a «Stand-alone-mode» and independently executes all programmed functions. Thanks to the flexible range of functions an external display can be connected directly to the DLS-B device via interface RS232 or RS422. Via a digital input, measurements can also be activated from an external button or switch.

Comfortable Configuration

In the twinkling of an eye ready for operation: For easy configuration of the DLS-B devices, the necessary software is at your disposal. With this software you can adapt settings on the device in a fast and comfortable way and activate the appropriate functions. The entire device configuration can be stored on a PC, in a configuration-file. In addition the software is also suitable as a diagnostic-, test-, and start-up-tool.

The software is freely available for download on our home page. It also includes different languages for international use.

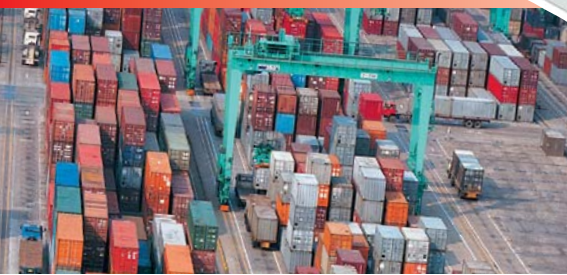




Flexible and functional



Container handling



Storage technology



Sensing winder/stacker



Specifications



Measuring range 0.05 up to 500 meters
With our DLS-B device you can measure distances from 0.05 up to 500 meters.



Accuracy of up to 1.5 mm The accuracy amounts to 1.5 mm – independent of distance and operating temperature.



Extended temperature range An optional heater gives you the possibility to apply the DLS-B device at temperature of -40 °C up to +50 °C.



Solid metal case IP65 The solid metal case effectively protects the device from ingress of dust and water. Application in an industrial environment is possible.



Wide range of supply voltage You can utilize the DLS-B device within a voltage range of 9 V DC up to 30 V DC.

Functions



Stand-alone-operation Your DLS-B device can be configured for a «stand-alone-operation.» After switch-on it automatically starts measuring. This means that applications without complex control systems are possible. The DLS-B device stores all of the configuration information.



External display You can connect an external display directly to the interface RS232 or RS422.



External trigger Via digital input you can activate measurements from an external position.

Interfaces



Serial interfaces Via interface RS232 you can connect the DLS-B device to a PC. Interface RS422 has been foreseen for industrial applications. It allows cable lengths of up to 500 meters.



Connection of several DLS-B devices Via interface RS422 you can control up to 10 DLS-B devices.



Analogue output 0/4 – 20 mA The analogue output assures you a simple integration in a control system. It is not necessary to implement an interface protocol. You configure your analogue output according to your measuring range.



2 digital outputs You have the possibility to configure 2 digital outputs with different switching thresholds. An additional digital output transmits a signal in case of error.



Flexible connection possibilities You can connect the DLS-B device via a D-sub-connector. Alternatively a connection with a screwed cable gland directly into the device is also possible.



Status display Four light-emitting-diodes (LED's) signalize the device status.



	DLS-B 15 (500602)	DLS-B 30 (500601)	DLS-BH 15 (500612)	DLS-BH 30 (500611)
Design conditions	Standard	Standard	Extended temperature range	Extended temperature range
Accuracy	± 1.5 mm	± 3 mm	± 1.5 mm	± 3 mm
Measuring range on reflective foil	0.05 to 500 meters	0.05 to 500 meters	0.05 to 500 meters	0.05 to 500 meters
on natural surface	0.05 to 65 meters	0.05 to 65 meters	0.05 to 65 meters	0.05 to 65 meters
Resolution	0.1 mm	0.1 mm	0.1 mm	0.1 mm
Supply voltage	9 to 30 V DC	9 to 30 V DC	24 to 30 V DC	24 to 30 V DC
Operating temperature	-10 °C to +50 °C	-10 °C to +50 °C	-40 °C to +50 °C	-40 °C to +50 °C
Housing	Metal-Case IP65	Metal-Case IP65	Metal-Case IP65	Metal-Case IP65
Light transmitter	visible laser, red	visible laser, red	visible laser, red	visible laser, red
Dimensions	150 x 80 x 55 mm	150 x 80 x 55 mm	150 x 80 x 55 mm	150 x 80 x 55 mm
Weight	665 g	665 g	690 g	690 g
Interfaces (Implemented standard features)	1 serial interface RS232 / RS422 1 programmable analogue output 0/4 to 20 mA 3 digital outputs, 2 programmable, 1 error display 1 digital input for external trigger			

LASER RADIATION
DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT



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