

# LD SERIES MULTI-FUNCTION DISPLAYS WITH TOUCHSCREEN

The range of LD multi-function displays from Lika Electronic offers the highest level of usability and versatility.

They feature a 7-segment graphic display with a touchscreen and a comprehensive set of plain text, symbols, and units. The LED display is bright and offers high-contrast readability. Additionally, the backlight can change to red, green, or yellow in response to specific events (for example, it can turn red when threshold limits are exceeded).

The combination of plain text and touchscreen functionality makes parametrization very user-friendly and intuitive. The devices have an IP65 rating.

The LD range is available in six models.

- LD210 is designed to interface with current and voltage analogue encoders.
- LD220 is designed to interface with SSI single-turn and multi-turn encoders.
- LD350 and LD360 are designed to interface with HTL encoders and NPN, PNP, NAMUR, and TRI-STATE sensors (AB signals).
- LD355 and LD365 are designed to interface with TTL/RS-422 and HTL differential encoders (AB /AB signals).



## LD210 Process Indicator for Analogue Encoders

The LD210 is equipped with two 16-bit analog inputs and can connect to current (0-20 mA, 4-20 mA) and voltage ( $\pm 10$  V, 0-10 V) analog encoders. It can display process values from Input 1 or Input 2 as well as the results of variable combinations of the inputs (sum, difference, etc.). Available functions include tare, separate totalization, linearization over 24 interpolation points, selection of the engineering unit, sampling time configuration, and more.

## LD220 Process Indicator for SSI Encoders

The LD220 accepts signals from single-turn and multi-turn encoders with an SSI interface, supporting resolutions ranging from 10 to 32 bits and a clock frequency of up to 1 MHz. The device can operate as either a Master or a Slave. Features include scaling, bit blanking, linearization over 24 interpolation points, selection of the engineering unit, sampling time configuration, and three HTL PNP control inputs (for example, for resetting the display value), among others.

## LD350, LD355, LD360, and LD365 Process Indicators for Incremental Encoders and Sensors

The LD350 and LD360 are designed to interface with HTL encoders and NPN, PNP, NAMUR, and TRI-STATE sensors that provide AB signals (single-ended output). The LD355 and LD365 are designed to interface with TTL/RS-422 and HTL differential encoders that provide both AB and complementary / AB signals. These devices support various operating modes, including position indicator, tachometer and speed indicator, frequency/RPM indicator, process meter, counter, timer, stopwatch, and more. Additionally, the LD360 and LD365 can measure and display two values simultaneously (e.g., counting and speed). The input frequency can reach up to 1 MHz. They also support counting direction and linearization functions.

All aforementioned models offer a variety of additional options, which may include direct current (+Vdc) and alternating current (+Vac) power supplies, auxiliary output to power the connected encoder (+5 Vdc, +24 Vdc), voltage/current analog outputs (0-20 mA, 4-20 mA, -10 to +10V, 0 to +10V), HTL PNP control inputs, PNP control outputs, relay outputs, and RS-232/Modbus RTU serial interface. These options can be freely combined, allowing users to configure the unit precisely to their needs, making it ideal for replacing old and outdated display models.

## LD200 Universal Display for Incremental and Absolute encoders

We would also like to highlight the LD200 universal display, which offers the maximum versatility and is perfect for e.g. encoder test tables.

The LD200 can interface with a variety of encoder types, both rotary and linear, including Push-Pull, Line Driver, Sin/Cos 1Vpp, and SSI outputs.

The user interface features a scratch-resistant polycarbonate keypad with **four multi-function keys and a high-brightness**, eight-character seven-segment display capable of showing both positive and negative values. The front panel also includes three LEDs for information and diagnostic purposes. The LD200 offers one digital input and three digital outputs for zero setting and limit switch functions.

**Several display modes can be selected**, including millimeters, inches, fractional inches, and degrees of rotation, as well as absolute or relative display. The menus allow the user to configure various functions, such as scaling, zero setting, counting direction, decimal point placement, safety limit switch, output code, and more.

The LD200 is also equipped with an RS-232 port for communication with a PC.

LD displays can be used in all applications that require measuring, counting, displaying, and controlling linear and rotary positions, angles, linear and rotary speeds, cycles, frequencies, flows, and more. Their numerous applications include, for example, the food industry, packaging lines, handling systems, bending machines, continuous material systems (e.g., extrusion machines), conveyor belts, cutting and winding applications, cranes, amusement parks, and many others.

