

# AMM80: DEDICATED TO YOUR PANASONIC<sup>®</sup> SERVO DRIVES AND LOGIC CONTROLLERS

The **AMM80 kit encoder** from Lika Electronic is highly versatile and can be equipped with the Panasonic<sup>®</sup> RS-485 interface, in addition to the SSI, BiSS C-mode, and RS-485 Tamagawa interfaces. The primary advantages of integrating the Panasonic<sup>®</sup> interface include full compatibility, simplified connections, and easy interfacing with PLCs, controllers, drives, and various industrial feedback devices from Panasonic<sup>®</sup>.

Products featuring the integral Panasonic<sup>®</sup> RS-485 interface are most popular in Asia but are widely used worldwide. They are typically employed in motors, cutting machines, product handling equipment, pick-and-place lines, and storage systems.

The serial interface supports baud rates of up to 2.5 Mbit per second and provides control and data fields, as well as status fields for diagnostic information. The AMM80 is a frameless, bearingless optical encoder, meaning it does not include a shaft, bearings, flange, or housing. It is designed to have a small footprint, a low profile, minimal weight, high resolution, and precise accuracy.

This encoder is ideally suited for direct integration into high-performance, space-critical applications such as large hollow-shaft motors (including direct-drive torque motors, brushless motors, and stepper motors), robots, robotic joints, electromedical devices, and various OEM motion control systems.

Additionally, it is available with a wide range of electrical options and can be customized to meet individual requirements.

This compact, slim, and lightweight encoder features a large hollow shaft with a through-hole diameter of up to 45 mm (1.77 inches), making it compatible with standard motor sizes. Applications with limited space and strict weight requirements benefit from its simple and quick assembly, which utilizes a pilot flange or two precision pins. Additionally, it requires no calibration.

Its operation is non-contact, and there are no components subject to wear or fatigue.

The AMM80 kit encoder provides position feedback with a resolution of up to 23-bit single-turn (8,388,608 cpr) and 16-bit multi-turn (65,536 revolutions).

An additional track offers 1,024 Sine/Cosine 1Vpp signals for speed feedback and interpolation.

For full compatibility with Panasonic<sup>®</sup> equipment, it can be fitted with the MUF connector, which is specifically designed for interfacing with Panasonic<sup>®</sup> servo drives.

Lika Electronic offers a diverse selection of absolute encoders in both rotary and linear configurations, which can be equipped with the Panasonic<sup>®</sup> RS-485 interface.

**Available rotary encoders include the AMM36, AMM5B, and AMM80 models, while linear encoders include the SMA2 and SMA21.**

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## Technical specifications

