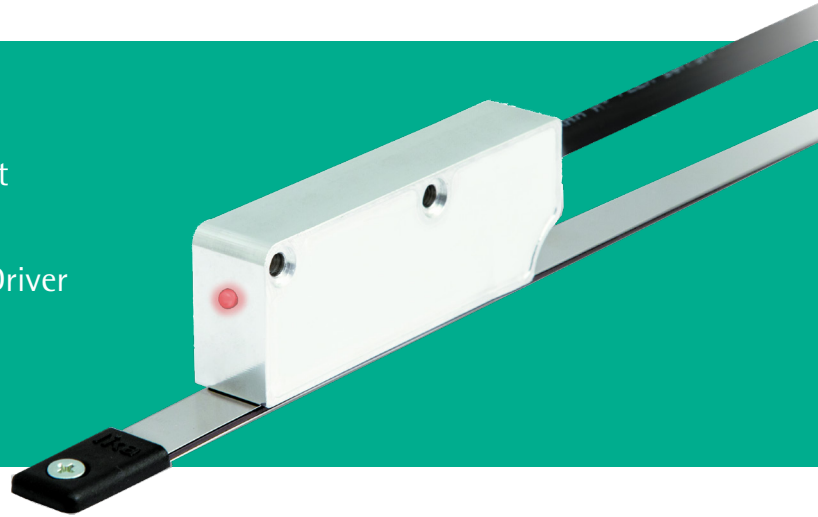


# SMA21 absolute linear encoder for long measuring lengths

- Compact readhead, IP67 protection
- Long measuring length up to 32.7 m / 107.28 ft
- Resolution down to 1  $\mu$ m
- BiSS-C, SSI, & Panasonic interfaces + AB Line Driver incremental signals for speed feedback
- With error bit and diagnostic LED



The **SMA21 absolute linear encoder** from Lika Electronic provides fine resolution down to 1  $\mu$ m and high accuracy of  $\pm 2 \mu$ m at fast speed up to 10 m/s.

It is ideally suited for challenging applications over very **long measuring lengths up to 32.7 m** (107.28 ft) where small size, fine resolution and great accuracy are mandatory such as in linear motors, product handling equipment, storage equipment, cutting machines, pick & place lines and robots, electronic assembly systems, printing and measuring machinery, electro-medical instruments, machine tools.

The measuring system is designed to provide both the absolute and the incremental information.

The MTA-A154 tape encodes two tracks: the true absolute pattern for position information and a 2 mm (0.078") pole pitch incremental track for speed feedback. It is shrunk down in width to 10 mm only (0.39") while the measuring length is lengthened up to 32.7 m (107.28 ft).

The MTA-A154 tape is insensitive to dust, oil, grease, water, and common chemical agents, thus the measuring system can reliably operate in the most aggressive industrial environments.

In addition, the dimensions of the sensing head are minimized; the enclosure is very compact and slim for installation in tight spaces, yet it maintains its toughness.

High-quality and selected electronics are fully over-moulded and resin-coated, so the encoder can guarantee IP67-rated environmental protection along with immunity to contaminants and interference.

By virtue of the non-contact operation, the SMA21 is virtually wear and maintenance-free and ensures strong reliability throughout its operating life.

An additional diagnostic LED shows the correct installation and alignment of the sensor and other information. The SMA21 **offers high resolution down to 1  $\mu$ m and enables speeds up to 10 m/s** (32.8 ft/s).

It delivers the absolute information through the **BiSS-C, SSI, and Panasonic interfaces** and the incremental information through the AB Line Driver incremental output circuit. The SMA21 is equipped with first-rate components and a high-flex cable especially suited for use in cable drag chains – it is tested for more than 1 million cycles.

For shorter measuring lengths up to 8.1 m (26.57 ft) the SMA2 is the perfect choice with the same features as the SMA21.

Lika Electronic products portfolio includes a wide selection of incremental and absolute linear encoders designed for the most diverse applications and needs.

[Pick from the comprehensive list](#)