RFID pure and simple: Universal reader TWN4 Slim

ELATEC's products and service support provide flexibility and peace of mind

With numerous formats and an array of bandwidths, RFID technologies are complex. Companies that want to enable their customers to conveniently use RFID transponders in identity and access management applications may find themselves facing choices that could result in high development and maintenance costs. RFID specialist ELATEC can help by providing consulting and development services for integrators and OEMs, and "universal" multi-technology RFID readers - a perfect example being ELATEC's new, extremely compact and flexible TWN4 Slim reader.

RFID promises users contactless convenience and security in applications from payment systems to user access control. But RFID is often a less familiar and comfortable technology for system integrators and OEMs. To serve its many customers a company likely must accommodate many transponder technologies and different RFID formats and frequency ranges with its solution. This is important for a primary reason: If a customer is already using transponders, they will want to continue using them in

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The ELATEC multi-standard RFID reader TWN4 Slim can be used for secure printing and in many other security solutions.

other applications. Solutions must therefore work with all standard technologies. Otherwise product and reader variations will result in increased development, inventory management, and maintenance costs and complexity.

Outsourcing RFID complexity

ELATEC, an RFID specialist with its global headquarters near Munich, Germany and USA headquarters in Palm City, Florida offers expert assistance and a unique range of solutions. Central to these solutions is ELATEC's multi-format technology: RFID readers that pack all important RFID technologies and frequency ranges into a single device. The benefits for OEMs and integrators are clear: They can integrate virtually one single "universal" ELATEC reader to keep their solutions compatible with all established RFID technologies worldwide. And to ensure importability and sales globally, ELATEC readers are certified for use in as many as 110 countries.

The company supports its customers and products with comprehensive consulting and support services. For instance, the readers can be modified to meet specific customer or solution needs. ELATEC experts assist customers in defining solution requirements, training, implementation in software and hardware, and ongoing support, regardless of geographic location.

As a result, ELATEC customers can focus on their core areas of expertise and access extensive RFID know-how to complement them. This not only minimizes project risks and schedules, but also adds essential value in times of IT skills shortage.

Introducing the TWN4 Slim universal reader

ELATEC's newest multi-technology RFID reader is the ultracompact TWN4 Slim. The TWN4 Slim is smaller than a credit card, measuring just 65.5 mm x 45.5 mm (1.8 x 2.5 in.) and is just four millimeters (0.16 in.) thick. It is equipped with integrated antennas for HF, LF and Bluetooth Low Energy (BLE). It also comes with a micro USB interface. An RGB LED and a sound generator provide signals in the authentication process. This new ELATEC reader supports all established RFID technologies and smartphone identification solutions with Near Field Communication (NFC) and BLE.

This reader is ideal for user authentication solutions in which the target device requires particular space-savings. Regardless of the specific integration, TWN4 Slim's biggest strength remains its flexibility: virtually regardless of transponder technology or mobile device, TWN 4 Slim will function as intended.

TWN4 Slim is already being used in secure printing applications, a market where ELATEC has a strong position. The compact dimensions of the flexible reader module are a powerful argument for printer manufacturers. To enable efficient maintenance in the field, device manufacturers and their maintenance technicians can install firmware updates directly via the USB interfaces. ELATEC offers a range of USB cable sets and adapters for the integration process. A SAM slot is available for applications that have increased security requirements

Maximum flexibility

The TWN4 Slim offers manufacturers a highly flexible option for implementing RFID authentication for access control and authorization in their products. The reader module can be flexibly configured and is equipped with its own intelligence and memory so that even applications created by the user can run directly in the reader.

Most importantly, since the TWN4 Slim supports all common RFID technologies in the 125 and 134.2 kHz as well as 13.56 MHz frequency ranges, no device variants need to be maintained. The support of NFC and BLE in the TWN4 Slim opens solutions for authentication via mobile phones - without additional development effort or cost.

Consulting services

- Analysis of existing processes/compilation of requirements
- Technology consulting services
- Function tests of customers' processes incl. demo
- POC: feasibility study
- Compilation of detailed specifications
- Roll-out plan

Implementation services

- Integration of ELATEC products and solutions in customer applications
- Development and production of customer-specific products/variations
- Flexible, customer-specific introduction of ELATEC products
- Development/modification of software and mobile applications
- Assessment/modification of hardware
- Development of customer-specific apps for readers, interfaces and host systems

Operational services

Technical support

- Maintenance and service assistance
- Fast problem solutions
- Product training and knowledge transfer
- Daily configuration and performance optimization

<u>Self-support</u>

- Remote management of ELATEC products
- Manuals/documentation
- Support center
- Simpler management of externally used products for upgrades and configuration
- SDK software development kit

Partner services

- Support for integration and/or implementation projects
- Integration of products and maintenance of solutions
- Support with technical requirements and problem solutions

Managed services

- Mobile BLE services and solutions for identity checks
- Multi-tenant-capable enrollment management of digital identities
- Advisory services, solution concepts and design-in for customer applications
- Second-level support for managed services

ELATEC GmbH

ELATEC is a designer and manufacturer specialized in products for identification solutions and is one of the leading international companies in the field of mult-ifrequency / multi-standard readers. OEMs and integrators are provided with read/write modules that combine contactless (RFID, NFC, Bluetooth) and contact-based (smart card) technologies. Depending on the product, up to 60 internationally common RFID technologies in the high (13.56 MHz) and low frequency range (125/134.2 kHz) are supported by one device. ELATEC is the cross-industry partner for companies who want to expand the potential of their products through innovative close-range identification solutions. Founded in 1988, the company has 14 locations worldwide and is headquartered near Munich.