Merkora

E-paper labels and pick-to-light for factories



Tile labels on kitting boxes, rendered from the design model; boxes, shelf and label data are stand-ins.

About

Merkora is an e-paper label and pick-to-light system for factories and warehouses, developed by Newmatik, an electronics manufacturer in Germany. Labels with an RGB LED and a button sit on kitting boxes, SMD magazines and shelves. The ERP decides what each label shows and when it blinks, so nobody has to search the racks, and button presses go back to the ERP.

The labels use the Bluetooth 5.4 Electronic Shelf Label standard and run on coin cells. Ceiling access points powered over Ethernet connect them to a bridge in the customer's network, and a control center links the bridge to the ERP: hosted by Newmatik, in the customer's own cloud or fully on premises. An app for ERPNext and a REST API are part of the system.

Merkora is in development: the hardware is designed and the software runs against a simulator. Newmatik will run the first labels in its own production before pilot sets go to other manufacturers. The software and firmware will be published under Apache-2.0 and the hardware under CERN-OHL-W-2.0 once the first version is stable.

Facts

Made by	Newmatik GmbH, an electronics manufacturer in Germany
Status	In development. Hardware designed (revision A); nothing fabricated, tested on hardware or certified yet. Software runs against a simulator
Labels	Strip 2.9″ (black and white, or four colours) and Tile 4.2″ (black, white, red, yellow), each with an RGB LED, a button and NFC
Radio	Bluetooth 5.4 Electronic Shelf Label profile, encrypted
Battery	Two CR2450 coin cells; design target five years or more
Access point	Ceiling mounted, powered over Ethernet; three or four for about 1,500 m²
Software	On-site bridge and control center; Merkora Cloud, your cloud or on premises
Integration	App for ERPNext; REST API and signed webhooks for other systems
Licences	Planned: Apache-2.0 for software and firmware, CERN-OHL-W-2.0 for hardware, once the first version is stable
Availability	Pilot sets for a few manufacturers, after Newmatik's own production. No prices published

For reporting: Merkora is not certified, not shipping and not yet measured. Battery life and reaction times are design targets.

Press contact

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Logos, renders and datasheets: merkora.dev/resources