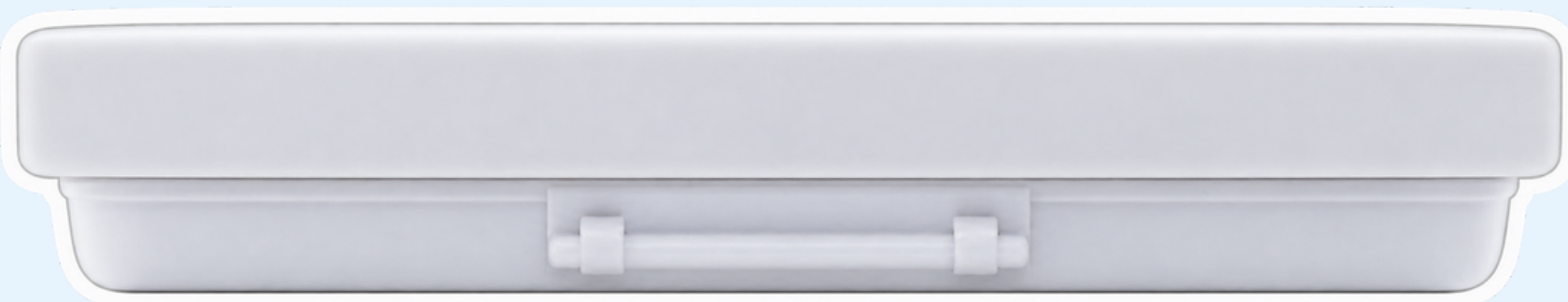


Ithina P-21

2.1" 4 Color 2.4 Ghz

E-Paper Display Electronic Shelf Label (ESL)

The Ithina P-21 is a smart, high-performance Electronic Shelf Label (ESL) designed to simplify retail & industrial operations. These intelligent multi-taskers enable real-time price updates, inventory visibility, & seamless communication, helping teams work faster and more efficiently. P-21 is easy to deploy and use; it is purpose-built for enterprise environments, delivering reliable performance, rugged durability, and long-lasting battery life for demanding retail operations.



FEATURES

Ultra-Low Power E-Paper Display	Integrated RGB LED
Vivid 4-Color Display (Black, White, Red & Yellow)	Optional NFC
Fast Wireless Updates	Enterprise-Grade Security
100 m Wireless Communication Range	Easy Installation
Cloud or On-Premise Deployment	Sustainable Retail Technology

Ithina P-21

2.1” 4 Color 2.4 Ghz

E-Paper Display Electronic Shelf Label (ESL)

TECHNICAL DATA	VALUE
Dimensions (mm)	42 x 48 x 13
Dimensions (inch)	1.7 x 1.9 x 0.5
Display Technology	Spectra TM 3100E5
Display Colors	Quad Color, BWRY
Active Display Area (mm)	27.5 x 27.5
Active Display Area (inch)	1.08 x 1.08
Viewing Angle (°)	170 (H) / 170 (V)
Resolution (pixels)	200 x 200
Pixel Density (ppi)	185
Max Number of Images	9
Operating Temperature (°C [°F])	0 to 40 [32 to 104]
ESL Operating Frequency (GHz)	2.4
Transmission Range (m)	100
Replaceable Batteries	Yes
Battery Qty/Size	1 x CR2450
Battery Lifetime	7+ Years
Active NFC	Optional
LED	1, Addressable RGB
LED Latency (sec)	≤ 1.0
Wireless FW Upgrade	Yes
Water Resistance	No
Cloud Enabled	Ithina CORE Software can be provided on Prem or in the Cloud
Rail Mountable	Yes, Horizontal
Housing Color	RAL9003 White, RAL 9005 Black
Weight (gram)	20
Weight (ounce)	0.7
Packaging Unit (# labels/box)	240
Compliance	FCC / IC / CE

Notes:

1. Battery life is stated for a well-managed RF environment and with up to 3 updates per day at room temperature

2. Batteries are field replaceable and can be procured from Ithina

3. Prefer avoiding direct exposure to sunlight or other IR/UV sources

4. Products may be affected if not operated or stored in accordance with Operational and Storage conditions

5. Long term product storage (more than 2 weeks) should be kept in compliance with specifications listed for the Operational Temperature and Relative Humidity range

6. It is highly recommended to use bold text when selecting small font sizes and any feature containing color to be at least two pixels wide.

7. Labels should be left at the operational temperature for at least 1 hour before any updates are made.

8. There is a trade-off between more frequent ESL updates and the impact of LED flashing on battery life, balancing usability with battery longevity

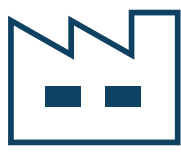
9. Image quality and perception is limited by display resolution, color and type/size of the font selected.

10. Technical data is subject to change at Ithina’s discretion. Fixtures and fittings should not be designed based on this information.

A PERFORMANCE EDGE IN ANY ENVIRONMENT



RETAIL



MANUFACTURING



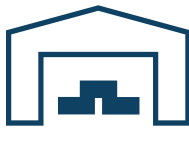
HEALTHCARE



HOSPITALITY



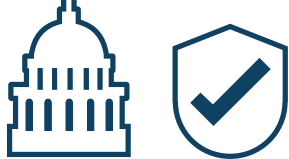
TRANSPORTATION
AND LOGISTICS



WAREHOUSING



FIELD SERVICE
AND UTILITIES



GOVERNMENT
AND PUBLIC
SAFETY

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