

# Hanshow Polaris-260R-N Electronic Shelf Label Holder User Manual

Home » Hanshow » Hanshow Polaris-260R-N Electronic Shelf Label Holder User Manual

#### **Contents**

- 1 Hanshow Polaris-260R-N Electronic Shelf Label Holder
- **2 Product Information**
- **3 Product Usage Instructions**
- 4 FAQ
- **5 STATEMENT**
- **6 SYMBOL DESCRIPTION**
- **7 EXPLANATION OF TERMS**
- **8 Overview**
- 9 Features
- 10 Product view
- 11 Dimensions
- 12 Hardware performance
- 13 Packaging and accessories
- 14 Application scenarios
- 15 Precautions
- 16 FCC statements
- 17 Documents / Resources
  - 17.1 References



Hanshow Polaris-260R-N Electronic Shelf Label Holder



## **Product Information**

## **Specifications**

• Product Name: Hanshow Polaris Pro-Q Series

• Model: Polaris Pro-Q

• Family: Pro-Q

• Dimensions: Various sizes as per Figures 2-3 to 2-12

• Compliance: FCC Part 15 Rules

## **Product Usage Instructions**

## Installation

- 1. Unpack the Polaris family packaging carefully.
- 2. Refer to Figure 1-1 for the ESL system architecture.
- 3. Choose an appropriate area for installation based on the key areas described in Table 2-1.

# Operation

- 1. Ensure a minimum distance of 20cm between the device and your body during operation.
- 2. Refer to the naming rules in Figure 3-1 and the nameplate in Figure 3-2 for identification.

#### **Maintenance**

- 1. Avoid making any changes or modifications that are not approved by the manufacturer.
- 2. Keep the device clean and free from dust or debris for optimal performance.

## **FAQ**

Q: What should I do if the device is not functioning properly?

**A:** If you encounter any issues with the device, refer to the user manual for troubleshooting steps. If problems persist, contact customer support for assistance.

#### Q: Can the device cause harmful interference?

**A:** The device is designed to comply with FCC rules to prevent harmful interference. Ensure proper installation and operation as per the guidelines provided in the manual.

#### **STATEMENT**

- This document and all its contents remain the proprietary material of Hanshow Technology Co., Ltd. (Hanshow) and are protected by Chinese laws and applicable international conventions on copyrights.
- Any reproduction, transmission, disclosure, revision, modification, or use otherwise of this document or the
  whole or part of its contents, in whatever form and by whatever means, is not permitted without prior express
  written authorization from Hanshow.
- Offenders will be liable for any damages caused by their offense hereof and will be subject to all remedies that Hanshow is entitled to seek under applicable laws.

#### **ABOUT THE MANUAL**

- This manual describes the features, specifications, packages, and precautions of Hanshow Polaris Pro-Q series Electronic Shelf Label (ESL) Products.
- Please read this manual carefully before using the device for the first time, and retain the manual for subsequent use or for the next owner. If the instructions contained in this manual are insufficient to resolve issues that occur during device operation or maintenance, please contact Hanshow Technical Customer Service Center (China: 400-0365-305; Netherlands: 0800-022-5037; Belgium: 0800-71-335; France: 0800-91-7602; Thailand: 1800-011-185) directly, we will provide you with multi-channel technical services.

#### **TARGET USERS**

• This document provides engineers with the necessary data and related guidelines for Polaris Proseries. Users have to master the basic knowledge of communication and networks and so on.

## This manual applies to the following engineers:

- Testing Engineer
- · Technical Support Engineer
- · After Sales Engineer
- · Installation Engineer

## SYMBOL DESCRIPTION

Icon	Description						
Δ	Information indicated with this icon should be paid special attention and attached great importance by the reader.						
	Information indicated with this icon is the explanation on the formal text for the readers to comprehend the text better.						
[X-X]	It means special noun definition is provided here.						

## **EXPLANATION OF TERMS**

Acronym	Expanded form		Description			
PriSmart	PriSmart Smart System	Retail	Manage all store product data and issue price update command, as well as support multi-store management.			
ESL-Working	ESL-Working System	U	Manage all the APs and ESLs in store, and ESL-Working 3.0 and above supports multi-store management.			
ESL Controller	ESL Controller		Also called AP that is used for data interaction between ESL-Working and ESL Controller.			
ESL	Electronic Shelf Label		Used for displaying product information like promotion information, price, and grade.			

# **Overview**

- The Polaris Pro-Q series is Hanshow's newest generation of Electronic Shelf Labels (ESLs). They adopt an E-ink screen to achieve page switching, light flashing, pricing and so on based on 2.4GHz wireless communication.
- With ultra-thin, extended life and high-definition visual effects, the Polaris series widely serves traditional retail, new retail, department stores and fashion, pharmacies, culture, and entertainment.

# System architecture

• Hanshow's ESL system is composed of ESLs, ESL Controller, ESL-Working, PriSmart, Database, Integration server, CloudMonitor, and Handheld Terminal (PDA), as shown in Figure 1-1.

 Specifically, the ESLs are used for electronically displaying product information such as name and price, and services available for customers.

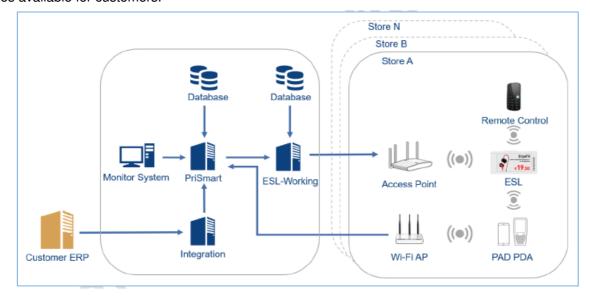


Figure 1-1 Hanshow ESL system architecture

## **Features**

#### The features of the Polaris series are as follows:

- Polaris ESLs come in 8 sizes: 1.6", 2.0", 2.3", 2.6", 2.8", 3.1", 4.2", 7.5", 2.3" Fand 2.8" F.
- Display colors include BWR (Black-White-Red) display.
- Operating frequency band: 2,402MHz ~ 2,480MHz.
- IP54 waterproof and dustproof design.
- Built-in LED indicator: 7-color display assists in product location, promotion reminder, out-of-stock reminder, and low power reminder.
- Embedded NFC chip: Supports NFC function. NFC response distance is 10mm.
- Polaris ESLs support multiple functions, including binding/unbinding, updating, instant flashing, multi-page storage, page switching, geolocation, temperature collection, NFC function, and so on.
- Supports AES-128 encryption.
- Supports OTA (Over-The-Air) upgrade.

## **Product view**

This chapter describes the Polaris Pro-Q series' appearance and composition.

## **Product Appearance**

Figure 2-1 shows Polaris Pro-Q family.

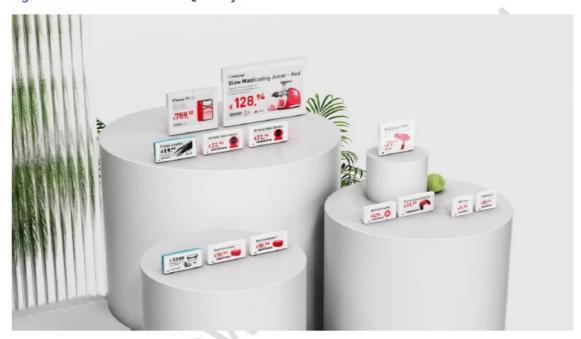


Figure 2-1 Polaris Pro-Q family

Each section of Polaris and its relative description is shown in Figure 2-2 and Table 2-1.

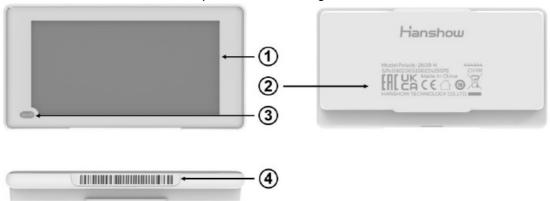


Figure 2-2 Key area of Polaris

Table 2-1 Each area description of Polaris

No.	Name	Description					
		Supports BWR display on E-ink screen.					
1	Display area	Display text, images, barcode, QR code and others.					
		Product information display such as name, price, origin, unit, grade, phone number, barcode, and QR code. Supports customizable display position and font size.					
		Supports 8-page storage and page switch functionality.					
2	Nameplate	Product information mark, including model, S/N, and certifications such as CE and UKCA.					
3	LED indicator	Supports 7-color flashing.					
4	Barcode area	18-digit barcode used for product binding and maintenance.					

# **Dimensions**

This section covers the dimensions of the Polaris series.

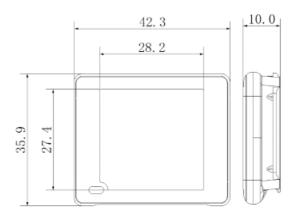


Figure 2-3 1.6" dimensions

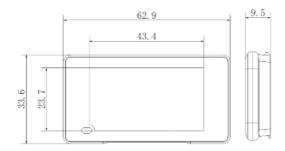


Figure 2-4 2.0" dimensions

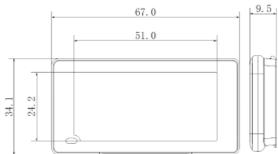


Figure 2-5 2.3" dimensions

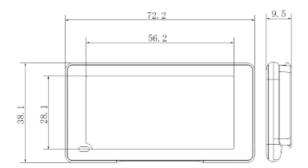


Figure 2-6 2.6" dimensions

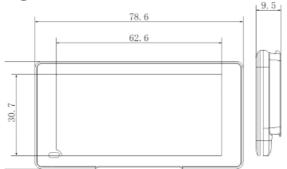


Figure 2-7 2.8" dimensions

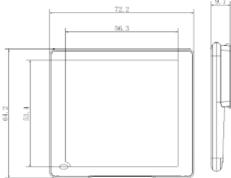


Figure 2-8 3.1" dimensions

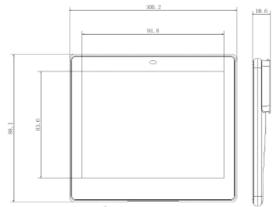


Figure 2-9 4.2" dimensions

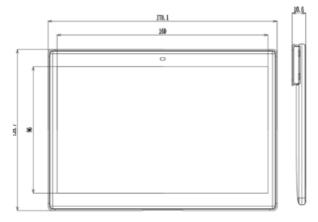


Figure 2-10 7.5" dimensions

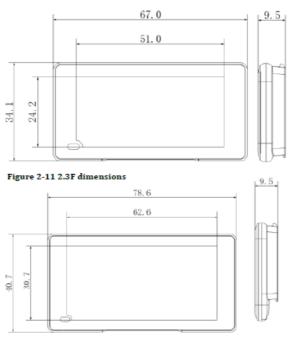


Figure 2-12 2.8F dimensions

# Hardware performance

# This chapter consists of:

- Specifications
- Identifying your ESLs
- Product nameplate

# **Specifications**

Table 3-1 lists the Polaris Pro-Q specifications.

able of the trial of the trial of the deposition of the trial of the t										
Name	1.6"	2.0"	2.3"	2.6"	2.8"	3.1"	4.2"	7.5"	2.3" F	2.8" F
Dimensions (mm*mm*mm)	42.3 * 35.9 * 10	62.9 * 33.6 * 9.5	67 * 34.1 * 9.5	72.2 * 38.1 * 9.5	78.6 * 40.7 * 9.5	72.2 * 64.2 * 9.7	100.2 * 88.1 * 10.6	178.1 * 125.7 * 10.6	67.0 * 34.1 * 9.5	78.6 * 40.7 * 9.5
Active display area (mm*mm)	28.2 * 27.4	43.4 * 23.7	51 * 24.2	56.2 * 28.1	62.6 * 30.7	56.3 * 53.4	84.8 * 63.6	163.2 * 97.9	51.0 * 24.2	62.6 * 30.7
Size (inch)	1.6	2.0	2.3	2.6	2.8	3.1	4.2	7.5	2.3	2.8
Resolution (pixel)[3-1]	200*200	250*128	250*122	296*152	296*152	300*300	400*300	800*480	250 * 22	296 * 152
DPI <sup>[3-1]</sup>	183	144	125	134	121	137	120	126	125	121
Display color	BWR							BW		
Viewing angle	Nearly 180 degrees									
Battery life <sup>[3-2]</sup>	Up to 10 years									
Page switch	8 pages									
Protection level	IP54						IP68	IP68		
Operating temperature[3-3]	0 ~ 40	0 ~ 40	0~40	0~40	0 ~ 40	0 ~ 40	0 ~ 40	0 ~ 40	-25~0	-25~0
Storage temperature[3-3]	0 ~ 40	0 ~ 40	0~40	0~40	0 ~ 40	0 ~ 40	0 ~ 40	0 ~ 40	-25~0	-25~0
Humidity (%RH)	30~70						45~65	45~65		

## Note:

- The resolution and DPI might be subject to slight variations.
- Battery life is calculated based on the following scenarios: The battery life is up to 10 years if updated twice a day for the following sizes: 1.6" (pouch battery)/2.0"/2.3"/2.6"/2.8" /3.1"/4.2" /7.5"/2.3" F/2.8" F; The battery life

is up to 5 years if updated twice a day for the following sizes: 1.6" (button battery).

• Room-temperature ESLs operate within 0°C ~ 40°C, however, low temperatures (0°C~10°C) might impact the ESL lifespan.

## Identifying your ESLs

You can identify your ESLs from the following Polaris naming rules.

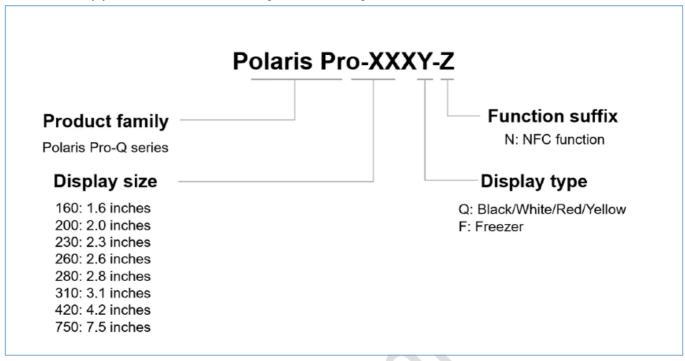


Figure 3-1 Naming rules for Polaris series

## **Product nameplate**

Taking Polaris-260R-N as an example, Figure 3-2 shows the nameplate of Polaris.



Figure 3-2 Nameplate of Polaris

**Note:** Each ESL has a unique S/N number. The above is for reference only, actual label information might vary.

# Packaging and accessories

This chapter describes the Polaris series' packaging and required accessories.

# **Packaging**

Polaris family packaging and the specific ESL quantity are shown in Figure 4-1.

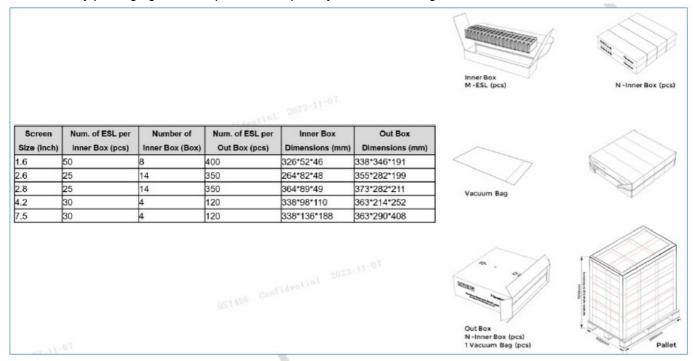


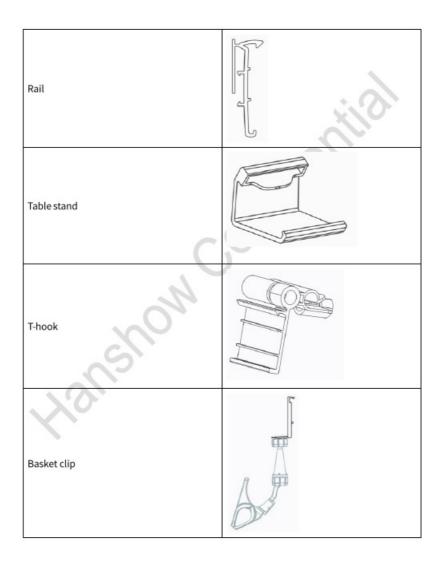
Figure 4-1 Polaris family packaging

Note: Packaging solution adjustment in progress.

## **Product Accessories**

Common accessories of the Polaris series are shown in Table 4-1.

Table 4-1 Common accessories of the Polaris series



# **Application scenarios**

• Polaris series are available in various zones and shelves of hypermarkets, supermarkets, and retail stores.

# The ESLs apply to areas with different fixtures:

- Shelves
- Hooks
- Fences
- Tables
- 0286

# **Precautions**

• During transportation and usage of the Polaris series, please note the following precautions.

# **Transportation considerations**

- Avoid the following considerations during transport
- Water leakage or heavy moisture.
- · Heavy stacking.

• High heat conditions above 40°C.

#### Precautions for use

## Follow the precautions:

- The room-temperature ELs operate best in normal operating and storage environments, 0°C ~ 40°C, 30% ~ 70%RH.
- Keep ESLs within the specified temperature range, otherwise, ESL screens might be damaged and the battery life might be shortened.
- The output capacity will degrade at low temperatures.
- Frequent communications or updates might shorten battery life during use.
- · Avoid dropping or tossing ESLs.
- Do not disassemble ESL without permission.
- · Do not disassemble ESL batteries.
- Do not scratch ESL bodies with sharp objects.
- Use Polaris dedicated disassembly tools when disassembling.
- The mineral substances in rainwater, moisture, or liquids might corrode the electronic circuit. Avoid water on the product as much as possible.
- · Regularly clean the screen.
- Promptly remove cosmetics, perfume, and other dirt on ESLs to avoid screen, case, or lens damage.
- Avoid direct contact with chemical detergent.
- Avoid direct sunlight or incandescent light on ESLs.
- Do not inace ESts near ring magnetic environment.
- Do not place ELs near kitchen appliances such as a stove, or a microwave oven.
- ELs communications might be limited or affected by other wireless communication systems that share the 2.4GHz frequency band, such as Wi-Fi, Bluetooth, or Zigbee.

#### IC statement

This device complies with Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions:

- 1. This device may not cause interference;
- 2. This device must accept any interference, including interference that may cause undesired operation of the device.

#### **UKCA** statement

All products of the Polaris series comply with UK Conformity Assessed (UKCA) standards. Polaris products include 1.6", 2.0", 2.3", 2.6" and 2.8".

## **FCC** statements

This equipment has been tested and found to comply with the limits for a Class B digital device, under part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a

residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used by the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**Caution:** Any changes or modifications to this device not explicitly approved by the manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference,
- 2. this device must accept any interference received, including interference that may cause undesired operation.

The device has been evaluated to meet general RF exposure requirements This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

For more information, visit our website at: <a href="https://www.hanshow.com">https://www.hanshow.com</a>

## **Documents / Resources**



<u>Hanshow Polaris-260R-N Electronic Shelf Label Holder</u> [pdf] User Manual Polaris-260R-N, Polaris-260R-N Electronic Shelf Label Holder, Electronic Shelf Label Holder, Shelf Label Holder, Label Holder, Holder

## References

- H Global Leader of Electronic Shelf Labels & Digital Store Solutions | Hanshow
- User Manual

Manuals+, Privacy Policy

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.