Intelligent
Sensing
Device

LEO-D ePaper Solution in Healthcare

Sub-1GHz Technology Ensures High-Penetration Data Transmission

Sub-1GHz

NFC

ADVANTECH

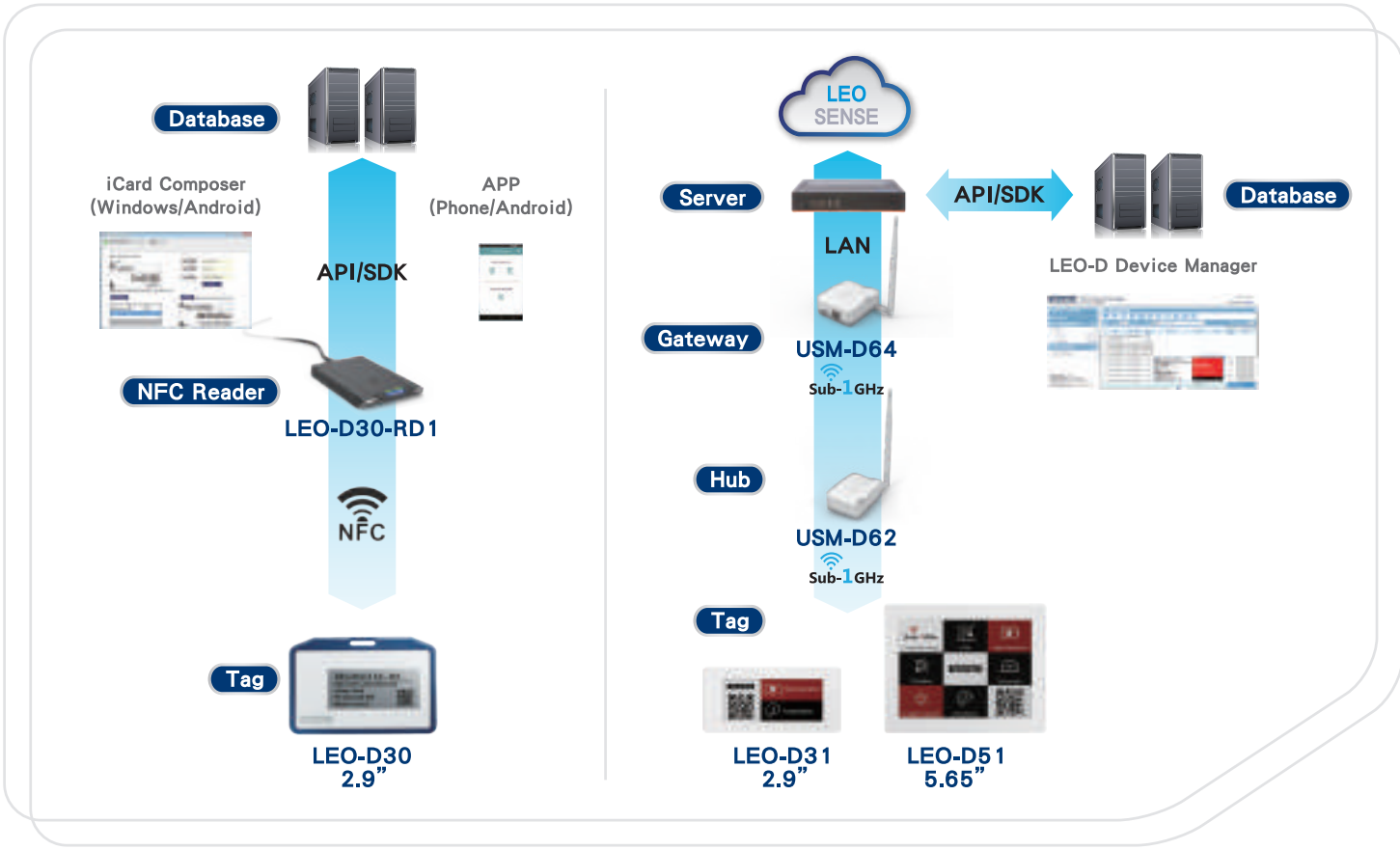
Enabling an Intelligent Planet

LEO-D ePaper Display Solutions

Advantech LEO-D ePaper Solutions

Centralized Management of ePaper Deployment

Advantech ePaper infrastructure is centrally managed and updated through the LEO-D Device Manager. The integrated back-end system can remotely transmit and receive data to and from the respective ePaper device. By providing a visual interface, monitoring of power, online/offline status, layout management and content preview, maintenance, and scheduling, LEO-D Device Manager delivers the flexibility to design and set up your very own customized use case.



Feature Highlights

- Sub-1GHz technology enables long-range data transmissions for rapid updates
- Ultra-low power consumption provides long battery life
- Wireless and compact design ensures rapid installation (within 3 seconds)
- Flexible display fastener with diverse mount methods (lock with screws, stick/paste)
- Rugged design with IP54 rated protection against water and dust ingress
- Sunlight-readable display with 180-degree viewing angle

Sub-1GHz Enhanced Communication

IP54 Rating

24 365 7 Long Lifetime

High Signal Penetration

Cableless Design

Sunlight Readable

3 Secs Rapid Installation

Convenient Updates

Advantech LEO-D ePaper Solutions

Industry-leading sub-1GHz technology for real-time content management in smart hospitals

Traditional paper-driven systems in hospital work and administration are fast becoming an idea of the past. Smart hospitals now leverage available technologies such as Advantech's LEO-D ePaper system, so that hospital staff and management can reduce errors and save precious time otherwise spent filling out paperwork. With time saved using an ePaper system that unifies patient care information and promotes smooth healthcare workflow, healthcare staff can focus on providing quality care for patients, quickly and with relative ease.

Benefits

For Doctors, Nurses and Other Patient-Facing Care Staff

- Reduce staff workload: ePaper automatically synchronizes with the Hospital Information System (HIS).
- Improve service efficiency to patients.

For Pharmacists

- Optimize drug inventory management in pharmacy.
- Reduce operation errors in medicine picking and administering.

For Hospital Administrators & Management

- Reduced total cost of ownership (TCO) savings
- Increased consistency in information entry (medical nomenclature) and patient care workflow, thus reducing risks of malpractice.

Four Reasons to Use Sub-1GHz in Hospitals

Roaming achieves flexible tag pairing for any workstation (such as a UD or rolling mobile cart, medication boxes, or bedside cards). Staffs may easily command fully synchronized patient care information. Received Signal Strength Indication (RSSI) techniques are also employed to wireless determine asset location.

Strong propagation for hospital environments with obstructed conditions.

Superior over-reaching feature on a single hub for minimal hardware (gateway/hub) investment and simplified site development.

Ultra-low power consumption to manage data flow uses significantly less power and maintenance expenses for battery replacement.

Ward Card

Patient information display

Medicine Box Tag

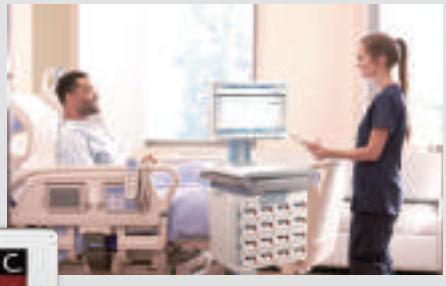
Drug inventory management

Bedside Card

Bedhead information

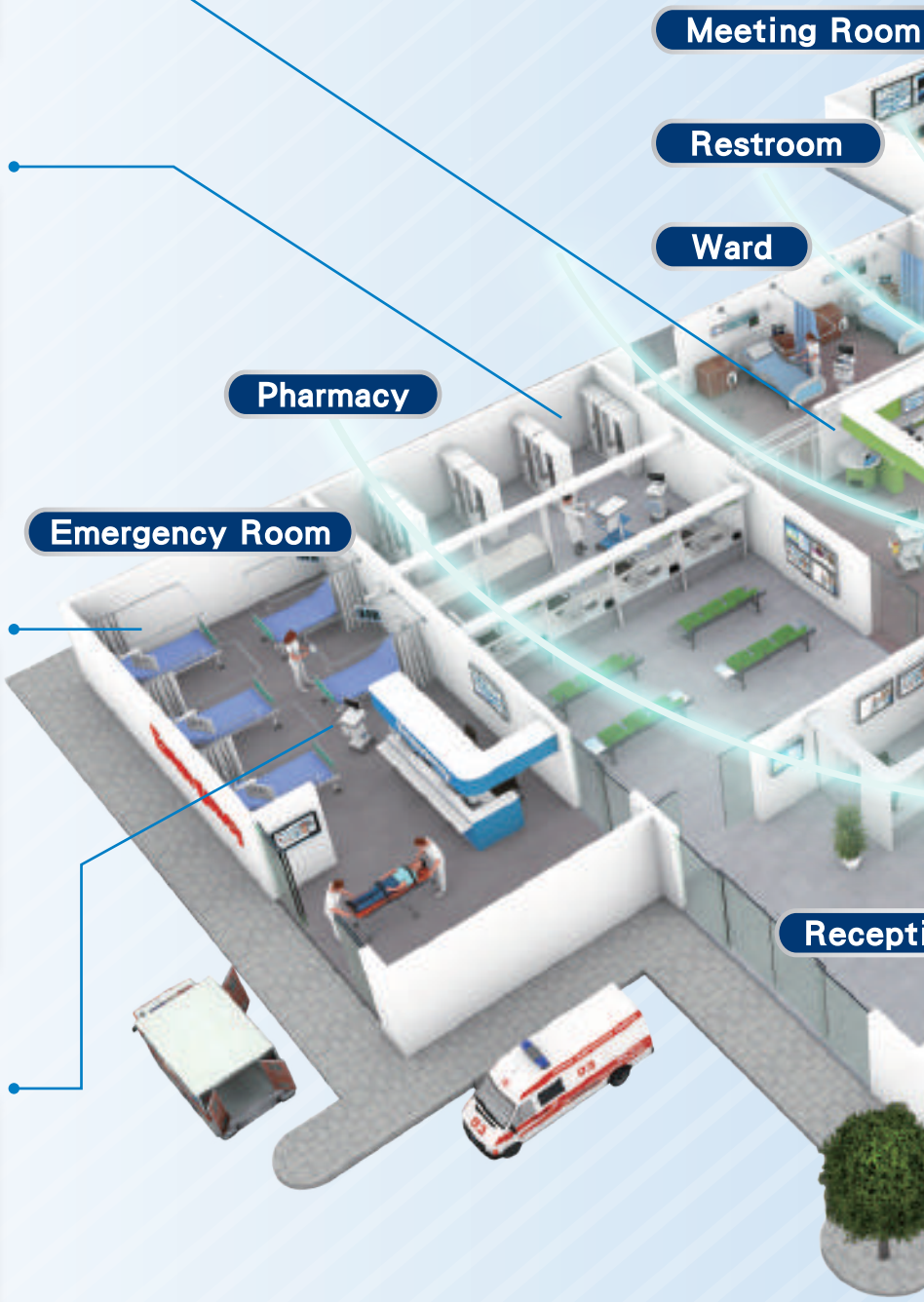
UD Cart Label

Medication bin administration



Sub-1GHz

Sub-1GHz technology is ideal for hospital applications with obstructed conditions. It easily penetrate its signal through brick walls with long transmission distances.



Meeting Room Information

Meeting subject, time period, booker, upcoming meetings, etc.

Information Signage

Safety and health policy announcement

Infusion Bag Tag

Dose information

Outpatient Clinic Sign

Service status

Ordering Information

	LEO-D30	LEO-D31	LEO-D51
			
Display Size	2.9"	2.9"	5.65"
Display Area	66.9 x 29.06 mm	66.9 x 29.06 mm	114.9 x 85.8 mm
Display Colors	Black/ White	Black/ White/ Red	Black/ White/ Red
Resolution	296 x 128 pixels	296 x 128 pixels	600 x 448 pixels
DPI	112	112	132
Dimensions	101 x 58 x 4.0 mm (without fastener)	92.6 x 45 x 10.3 mm	140.8 x 114 x 16.5 mm
Weight	36 g	50 g	195 g (without battery)
Protocol	ISO/IEC 15693, 14443a	Propritary Sub-1GHz ISM band	Propritary Sub-1GHz ISM band
Frequency	13.56MHz	868MHz/915MHz	868MHz/915MHz
Power Supply	Powered by Reader	3 x CR2032 battery	3 x AAA battery
Operating Temperature	0 ~ 40°C (32~104°F)	0 ~ 40°C (32~104°F)	0 ~ 40°C (32~104°F)
IP Rating	IP54	IP54	IP54
Certifications	N/A	CE, FCC, NCC, TELEC	CE, FCC, NCC, TELEC

Part Number	Display		Communication		Appearance	
	Size	Colors	Frequency	Region	Front/Back	Fastener
LEO-D30-B00	2.9"	Black/White	13.56 MHz	Worldwide	White/Blue	Blue
LEO-D31-R0E80	2.9"	Black/White/Red	868 MHz	Europe	White/Blue	White
LEO-D31-R0N90	2.9"	Black/White/Red	915 MHz	US/Japan/China/Taiwan	White/Blue	White
LEO-D51-R0E80	5.65"	Black/White/Red	868 MHz	Europe	White/Blue	White
LEO-D51-R0N90	5.65"	Black/White/Red	915 MHz	US/Japan/China/Taiwan	White/Blue	White

	Gateway USM-D62	Hub USM-D64
		
Interface	Ethernet and wireless	Wireless
Protocol	Proprirtary Sub-1GHz ISM band	Proprirtary Sub-1GHz ISM band
Frenquency	868 MHz or 915 MHz	868 MHz or 915 MHz
LED indicator	Green (power), Blue (network), Red (Error)	Green (power), Blue (network), Red (Error)
Transmission Range	100 meters (328 ft) line of sight	100 meters (328 ft) line of sight
Connected Quantity	15 hubs	1000 LEO-D tags
Power Supply DC	DC 5V1A mini USB	DC 5V1A mini USB
Dimensions	78 x 68 x 30.3 mm (3.07 x 2.68 x 1.19 in) excluding antenna	68.5 x 49 x 33 mm (2.7 x 1.93 x 1.3 in) excluding antenna
Weight	84 g (0.185 lb)	60 g (0.132 lb)
Operating Temperature	0 ~ 40 °C (32 ~ 104 °F)	0 ~ 40 °C (32 ~ 104 °F)
Certifications	CE, FCC, NCC, TELEC, BSMI	CE, FCC, NCC, TELEC, BSMI

Part Number	Gateway & Hub		
	Type	Frequency	Region
USM-D62-E80	Gateway	868 MHz	Europe
USM-D62-E90	Gateway	915 MHz	US/Japan/China/Taiwan
USM-D64-E80	Hub	868 MHz	Europe
USM-D64-E90	Hub	915 MHz	US/Japan/China/Taiwan

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