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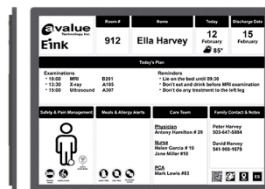


# Datasheet

## Avalue

### EPD-42T

42" E Ink Monochrome ePaper Display with built-in Touch Screen



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## EPD-42T

### Communication Board

- > 42" E Ink Monochrome ePaper Display
- > Built-in Touch Screen
- > High Performance i.MX 7Dual Processor
- > Ultra-Low Power Consumption
- > Ultra-Wide Viewing Angle
- > No Power Needed to Maintain Display Image
- > Front IP65, Rear IPX1
- > Sunlight Readable and Doesn't Require a Backlight

#### + Spec

-System Information-	
<b>Processor</b>	NXP i.MX 7Dual Processor / Dual Arm® Cortex®-A7 Cores And Cortex-M4
<b>Platform Controller Hub</b>	NXP MCIMX7D7DVM10SD
<b>System Memory</b>	On-Board 2GB DDR3L
<b>I/O Chipset</b>	PCA9555
<b>Board</b>	EMX-IMX7
<b>Battery</b>	Wide Temperature RTC Battery
<b>Antenna</b>	2 x Antenna with dust cover
Expansion	
<b>Expansion</b>	1 x M.2 E-Key socket for WiFi/BT module expansion
Storage	
<b>Storage</b>	On-Board 8GB eMMC / microSD Socket
<b>Other Storage Device</b>	1 x Micro SD card slot
External I/O	
<b>USB Port</b>	2 x USB 2.0 (Edge I/O) 1 x Micro USB for USB OTG
<b>LAN Port</b>	1 x RJ-45 connector for Gigabit Ethernet
<b>Wireless LAN Antenna</b>	Optional with M.2 module
Panel	
<b>LCD Size</b>	42"
<b>LCD Panel</b>	E Ink ED420TE1
<b>Display Type</b>	E Paper Display
<b>Resolution</b>	H:2160 × V:2880
<b>Pixel pitch</b>	0.2975 (H) x 0.2975 (V)
<b>Contrast ratio</b>	15:1 (Typ.)
<b>Viewing angle</b>	180(U), 180(D), 180(L), 180(R)
<b>Backlight</b>	Sunlight Readable / No Backlight Required
<b>Touch Type</b>	Projective Capacitive
<b>Touch Screen</b>	Built-in Projective Capacitive Touch Screen
<b>Touch Light Transmission</b>	≥ 80%
<b>Touch Controller</b>	IL2325
<b>Touch Interface</b>	USB
I/O	
<b>GPIO</b>	4 x GPIO I/F
<b>Serial</b>	2 x TTL Serial I/F ; Supports Optional TTL to RS-232 Converter ; Supports Optional TTL to RS-485 Converter Supports Optional TTL to USB Converter
Wireless Communication	
<b>Bluetooth</b>	Optional
DC In/Out Characteristics	
<b>Power Type</b>	DC-12V
<b>Working Voltage</b>	DC-12V
Mechanical	
<b>Power Connector Type</b>	Lockable DC Jack
<b>Weight</b>	6.5kg
<b>Shipping Dimension</b>	983 x 876 x 121 mm
<b>Shipping Weight</b>	12.1kg
<b>Color</b>	Black
Audio	
<b>Audio Codec</b>	CIRRUS WM8960 Stereo codec
<b>Speaker Output</b>	2 x 0.5W Speakers
Reliability	



<b>EMI Test</b>	CE/FCC-B
<b>Operating Temperature</b>	0°C ~ 40°C (w/SSD, mSATA) ambient with air flow
<b>Operating Humidity</b>	5% ~ 90% relative humidity, non-condensing
<b>Unit Weight</b>	6.5kg
<b>Storage Temperature</b>	-20°C ~ 60°C
<b>Packaging Vibration Test</b>	With On-Board 8GB eMMC/On-Board 1GB DDR3L: 0.5 Gms, IEC 60068-2-64, Random, 5~ 500Hz, 1hr/axis (Only for Z-axis)
<b>Packaging Drop Test</b>	Avalue Standard Test Criteria (Change to use ISTA-1A)
<b>Certifications</b>	
<b>Certification Information</b>	CE (EN 62368-1) FCC Part 15 Class B
<b>Ethernet</b>	
<b>LAN Chipset</b>	ICPlus IP1001M Gigabit Phy
<b>LAN Port</b>	1 x RJ-45 Supports 10/100/1000 Base-T
<b>Power Requirement</b>	
<b>Adapter</b>	Input: 100~240Vac/50~60Hz; Output: 60W (12V/5A)
<b>Mechanical &amp; Environmental</b>	
<b>Operating Temperature</b>	0°C ~ 40°C (w/SSD, mSATA) ambient with air flow
<b>Storage Temperature</b>	-20°C ~ 60°C
<b>Operating Humidity</b>	5% ~ 90% relative humidity, non-condensing
<b>Weight</b>	6.5Kgs
<b>IP Rating</b>	Front IP65 / Rear IPX1
<b>VESA</b>	100x100
<b>Dimensions(W x L x D)</b>	918.8 x 704.6 x 37.6 mm
<b>Power Requirement</b>	DC-12V
<b>Software Support</b>	
<b>OS Information</b>	Android / Linux
<b>In-Box Accessory</b>	
<b>Accessory</b>	1 x Power Adapter 1 x US Power cord 1 x Wall mounting bracket 1 x Wall locking bracket 1 x Pan head screws (D6.8, M4*10mm) with washer (D8.1) 4 x Thumb screws (M4*10L) 2 x Pan head screws (D6.85, M4*6mm)
<b>Ordering Information</b>	
<b>Ordering Information</b>	EPD-42T-3 42" E Ink/NXP EMX-IMX7/PCAP/LAN/USB/Front IP65/12V/CE/FCC/Landscape/Portrait

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