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IR Touch Interactive Flat Panel Display Datasheet

Model		LT86
Image		
Display		
Diagonal display size		86(inch)
Bezel color	Aluminum frame(Black color)	√
Panel type	DLED	√
Active area (mm)		1895.04 * 1065.96(V)
Resolution	3840*2160 /60hz	√
Pixel Pitch		0.4935 mm x 0.4935 mm
Hardness Glass	Mohs-7 level (Mohs-9 level for option)	√
Glass Panel	Anti-Glare glass with zero bonding	√
Aspect Ratio	16:9	√
Brightness	350cd/m2	√
Color depth	1.07 billion colors	√
Viewing angle	178°	√
Life span	50,000 hours	√
Touch		
Touch Technology	IR touch	√
Multi Touch	Max 40 points(Windows)/ Max 20 point (Android)	√
Touch Precision	1 mm (over 90% Area)	√
Auto-Calibration	Yes	√
Anti-light	Yes	√
Minimum object size	2mm	√
Touch Response Time	First Point <2 ms, Continuation <8 ms	√
Supporting OS	Windows 7/8/10/11; Android; Mac; Linux; Chrome OS	√
Speaker		
Front Speakers	8Ω 15W*2	√
Front Side Connections		
Public USB-A 3.0	3 (Public)	
Touch USB B	1	
HDMI IN	1	
USB C	1 (USB data only, full function USB-C is for optional)	
Front Keys	Power on/off	
Light Sensor	√	
Back Side Ports		
SPDIF OUT	*1	√
RS232	*1	√
RJ45 IN	*1	√
LINE IN	*1	√
LINE OUT	*1	√
TYPE-C	*1	√
Touch USB-B	*1	√
HDMI OUT	*1	√
HDMI IN	*1	√
USB2.0(Android)	*2	√
USB3.0 (Android)	*1	√
WIFI 2.4G/5G antenna	2.4G/5G (Wifi 6)	√
BT	5.4	√

Camera		
Number of images	48MP	√
Maximum resolution and frame rate	8000*6000@5fps 4200*3120@20fps 3840*1920@30fps	√
FOV(field of view)	D=119 ° H=97 ° V=74 °	√
Microphone		
Type	Wide-area microphones	√
Number of Microphones	8	√
Auto switch (Windows/Central)	Yes	√
Android OS		
Android Version	Android 16.0	√
CHIPSET	RK3576	√
CPU	ARM 4x Cortex-A72 @ 2.2GHz + 4x Cortex-A53	√
GPU	ARM Mali-G52 MC3/MP3	√
Memory	8GB DDR4	√
Storage	128GB	√
OTA	Yes	√
Light Sensor	Yes	√
General Information		
Power Supply	~ 100-240 V (50/60Hz)	√
Standby Energy Consumption	≤ 0.5 W	√
Power Consumption		Maximun < 350W Eco <75W
Net Weight	(KG±2)	70
Gross Weight	(KG±2)	85
Screen Dimensions	(WxDxH)	1953.4*101.7*1164 mm
Dimensions Package	(WxDxH)	2090 *190 * 1307 mm
VESA Standard	(mm)	800*400 mm
Working environment		
Operating Temperature	0°C - 40°C/32 - 100 F	√
Storage Temperature	-20°C - 60°C/-4 - 140 F	√
Storage Humidity	10 % - 90 %	√
Usage Humidity	10 % - 90 %	√
Accessories		
Accessories	WIFI antenna * 3; inkless pen * 2, remote control * 1, 1.5m power cord * 1, 1.5m HDMI cable * 1, 1.5m USB touch cable * 1 (optional 3m, 5m); wall mounting kit	
Software Ecosystem(Umind Whiteboard Software)		
Multi-Touch & Object Manipulation	Supports high-precision multi-user writing with object-based processing. Users can seamlessly transform, translate, rotate, and resize objects. Includes advanced features like Text-to-Speech (TTS) and color customization for inclusive teaching.	
Comprehensive Teaching Toolkit	Integrated with professional pedagogical tools, including digital rulers, protractors, compasses, and timers. Features specialized utilities such as Screen Recording, Spotlight, and Magnifier to focus student attention on key content.	
Extensive File & Format Support	Native support for opening, annotating, and managing a vast range of file formats: Office Suite (DOC, XLS, PPT), PDF, CAD (DWG), 3D Objects (OBJ, PBN), ZIP/RAR archives, and high-definition multimedia files.	
Multi-Window & Task Management	The software allows for multi-window document viewing, enabling teachers to compare different files or objects side-by-side on a single screen without lag.	
3D & Science Simulations	Built-in library of interactive 3D objects and simulations for Physics, Chemistry, and General Science. Includes a Dynamic Periodic Table of Elements and virtual laboratories for safe, hands-on scientific exploration.	
AI-Powered Visualization	Features intelligent algorithms to automatically generate Mind Maps and Data Tables. Users can brainstorm and organize complex ideas into structured visual diagrams with a single touch.	
Whiteboard Camera & Sharing	Supports opening the integrated camera directly within the whiteboard for live demonstrations. Lessons can be recorded and shared instantly via QR Code generation for students to download and review.	
Intelligent Image Recognition	The AI engine supports Automatic Image Recognition, allowing the system to identify hand-drawn sketches or uploaded photos and suggest related educational resources or search results.	
Live Streaming Capabilities		
Direct Integration	The system provides native live streaming support with no additional configuration or authorization required. It can be utilized directly out-of-the-box.	
Hardware-Level Support	Fully supports the integrated 48MP camera and 8-array microphone system, ensuring high-quality broadcasting	
Long-term Service Guarantee	Includes at least 3 years of service with no additional fees, ensuring reliable support and operational cost-efficiency for the end user.	
Artificial Intelligence (AI) Capabilities		
AI Voice Assistant	Supports advanced Natural Language Processing (NLP) for voice commands, device control, and application management.	
Intelligent Recognition	Built-in high-speed OCR for Handwriting-to-Text and Smart Shape Correction, converting sketches into precise digital geometric forms.	
AI-Powered Lesson Prep	Automated generation of lesson plans, formative quizzes, and multimedia resources based on curriculum keywords.	
Live Captioning & Translation	Real-time Speech-to-Text transcription of lectures into on-screen captions with simultaneous multi-language translation.	
Vision Roll (AI Attendance)	Utilizing a 48MP AI camera for automated Facial Recognition to track and log student attendance by class, grade, and school.	

Engagement & Posture Analysis	AI camera monitors classroom atmosphere by analyzing student attention levels, eye contact, and sitting posture in real-time..
Automated Assessment	Scans and analyzes student assignments or test papers via the touch screen for instantaneous grading and diagnostic error feedback.
Educational Resources & Content	
Interactive STEM Resources	Pre-installed with PHET Interactive Simulations (fully authorized) covering Physics, Chemistry, and Math to support inquiry-based learning.
Built-in 3D Resource Library	Includes over 300+ professional 3D resources across various subjects (Biology, Physics, Chemistry, etc.), allowing teachers to rotate, zoom, and interact with complex models.
Tiered Resource Management	Supports school-owned or regional resource spaces with tiered authorization, allowing content sharing and management at school, teacher, and student levels.
Universal File Reader	Seamlessly opens and annotates over high-level educational formats including PBN, OBJ, CAD, and interactive 3D files directly within the whiteboard.
Cloud Interaction & Management (DMS)	
Device Management (DMS)	Centralized cloud-based control for remote power, security locking, hardware diagnostics (Camera/Touch/Mic), and OTA firmware updates.
Cloud Integration	Seamless synchronization with Google Drive and OneDrive. Features an AI Library for voice-activated resource inquiries.
Collaborative Interaction	Supports Plyvoice (remote meeting join via QR) and Interactive Voting tools with real-time result visualization on all connected devices.
Cloud-Based CMS	Features a powerful Content Management System allowing administrators to remotely push multimedia content, emergency alerts, and school notifications to all connected displays.
Multi-Level Account Management	Supports a hierarchical account system, including Super Administrators, Institutional Administrators, and Individual Users, to manage the entire device fleet efficiently.
Security, Compliance & Certification	
Data Sovereignty	Guarantees all network services, servers, and data storage are physically localized within the required region to ensure legal compliance.
Regulatory Certifications	Certified with CE (EMC+LVD), CB, CCC, RoHS, REACH, FCC, and Energy Star. Fully compliant with Google EDLA requirements.