



Networked Media Processor

— Datasheet —



Features	Product	Model	Components
Device Control Only	Networked Media Processor (Reduced)	NMP 221-R-L2U	NMP221*1
			Touch Panel CPL20*1
			Wireless Microphone *2
	Control Box	CBX100	CBX100 * 4 (at most for each NMP)



Features

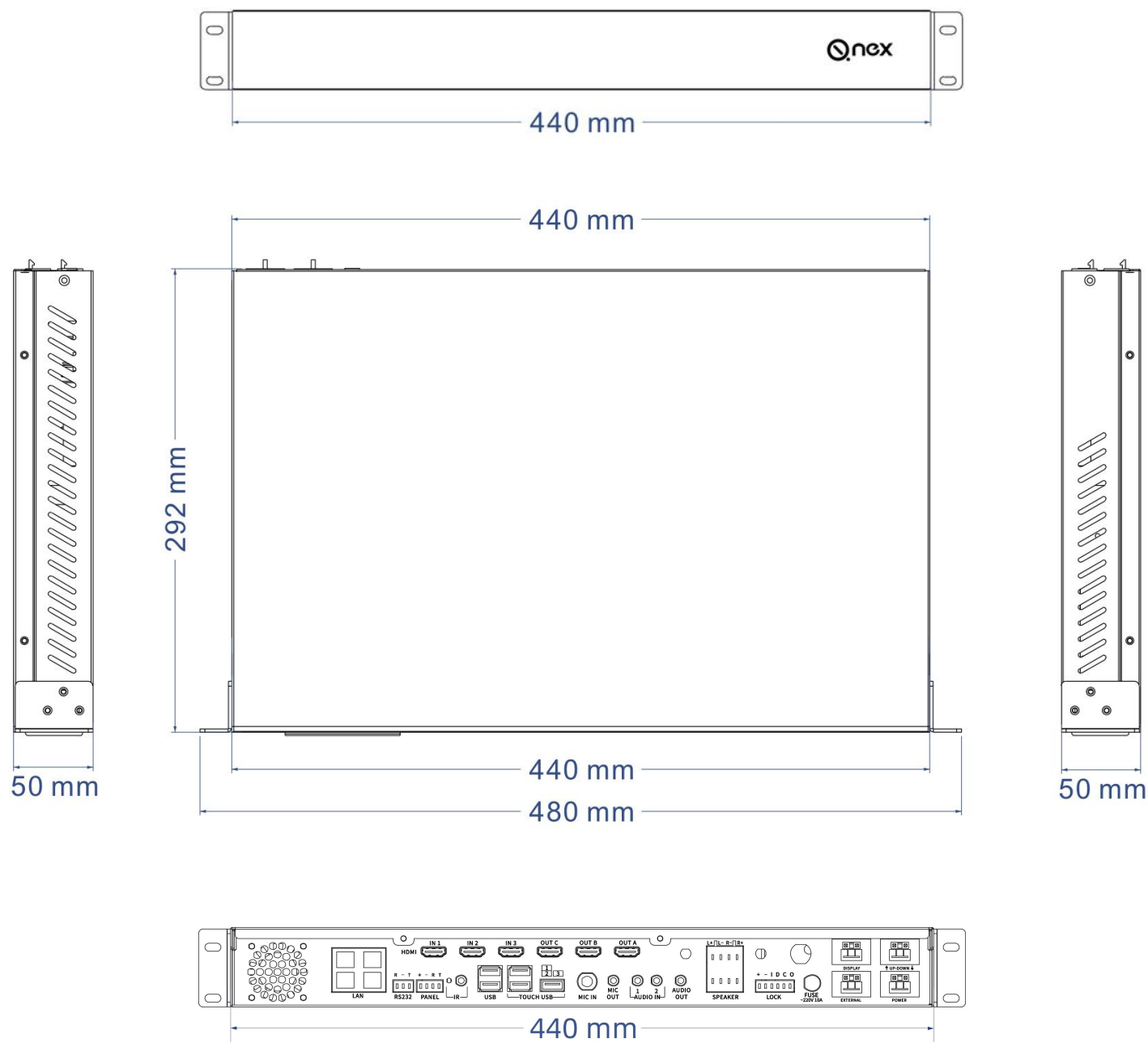
- Device Control
 - To control devices through the Touch Panel.
 - To control through web-based platform Q-NEX Console from anywhere with an Internet access.
- Access Control
 - With a built-in electronic lock control module for door security, it allows authorized access by tapping an IC card.
 - IC card could also be used for activating the Touch Panel, so that students without permission can't mess up with the facilities.
- AV Matrix Switch
 - To route audio and video signals from multiple input sources, to one or more display devices, like projector, TV, interactive flat panel.
- Push Notification
 - To display daily messages, emergency alerts, announcements etc., delivered by admin in the classroom.

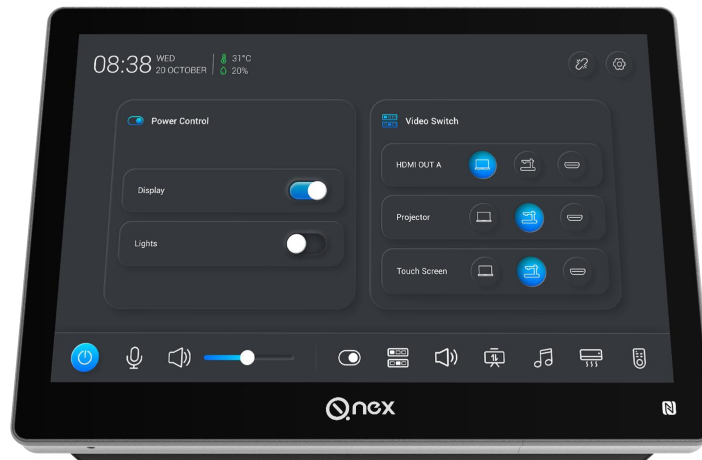
Specifications

Specification	
Size(mm)L*W*H	440*292*50mm
Weight	3.9Kg
Standard 1U rack-mount design	Suitable for installation in various types of cabinets
Industrial-grade embedded motherboard	High-speed 32-bit CPU ; Embedded operating system ;
LAN switch	4 * 10M / 100M RJ45 network switch ports
Audio matrix module	2*3.5mm line in; 1*3.5mm line mixed out;
Microphone	1*6.35mm wired MIC in; 2*UHF wireless MIC in; 1*3.5mm MIC out;
HDMI matrix module (Input * Output)	3*3 HDMI 2.0 Matrix Module, support 4K@60Hz, support HDCP 2.2 and HDCP 1.x
Communication interface	1*RS232; 2*USB 1*USB-DEVICE In 2*USB-HOST Out 1*Phoenix 4-Pin for control panel 1 * IR OUT, for remote controlling IR devices like air conditioner, TV, projector etc. 1 * IR IN, for learning IR codes and store on the Cloud-based platform
Power amplifier	2*(40W+40W), support to connect at least 2 pairs of passive speakers
Access control	+: Power output, Voltage: 12V, Current: 800mA -: Power ground (negative level) I: Door switch interface D: Door lock status interface C: Relay common end, Load capacity: DC 3A at 30V O: Relay normally open, Load capacity: DC 3A at 30V
Power control	1* power supply for NMP, support wide voltage (110-240ACV) 1* single pole double throw (SPDT) switch 1* power output for electric projection screen or electric curtain 1* power output for display or others 1* Power fuse
Antenna Ports	1* antenna port for wireless microphone 2* antenna ports for Wi-Fi module
Remote control & centralized management	Centralized control and management of classroom devices such as PCs, projectors, A/C, power supplies of external devices through the Internet
	Remote statistics on the usage and status of classroom devices, such as: equipment usage logs, energy consumption, etc.
Push Notification	Display daily messages, important alerts and announcements delivered by IT admin or teachers in text format in the classroom displays instantly or on schedule.

Specification		
Wireless module	RF Transceiver	“Wi-Fi friendly” 2.4 GHz spread spectrum 2-way RF (2400 to 2483 MHz)
	RF Transmitting Power	13.5dBm
	Range	< 30 m
Connection	Control IBox (CBX)	support for connecting up to 4 units of control box for extended RS232/IR/Relay control
Wireless MIC Receiver	Power supply	5V/150mA
	Frequency bandwidth	50MHz
	Frequency response	30hz-15KHZ
	Frequency range	640-690MHz
	Maximum channels	200
	Receiving sensitivity	<=-105dBm
	SNR	>= 80dB
	Audio output level value	350 mV
	Distortion (THD+N)	<0.5%
	Latency	<3ms
	Operating temperature	-25C°-60C°

Dimensions





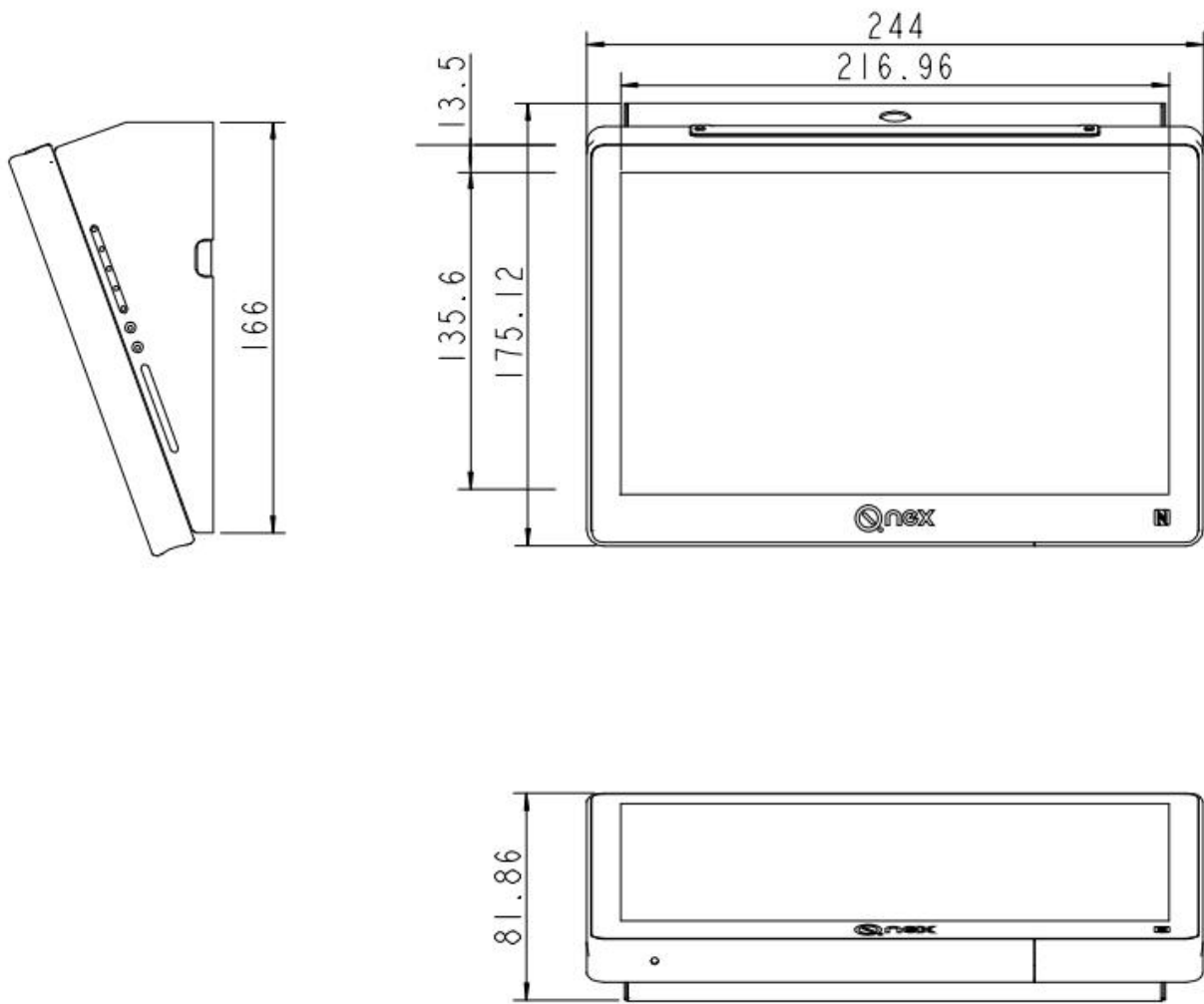
Features (CPL20)

Features		
1	Panel Control	Swipe IC card to unlock; click to lock panel
		Password to lock panel
2	Audio Control	Switch audio sources to HDMI out A / Audio 1/2
3	Video Control	Matrix switch video input sources to THREE displays
4	Volume Adjustment	Adjust the volume/treble/bass of speaker and microphone
5	Power Control	The displays and external devices power on/off
6	Curtain Control	Screen up/down/stop
7	A/C Control	Control air-con power, temperature, modes
8	Remote Control	Send commands for IR devices control
9	RS232 control	To control devices through RS232, E.g. projector / IFP / IQVideo
10	CBX control	To control devices that attach to control box
11	Push Notification OFF	Exit non-mandatory Push Notification
12	Divisible Room	Turn on/off the divisible room mode, set the divisible room devices
13	CBX Control	Control NMP-connected CBX for extended device control
14	Lecture Capture Control	Control lecture capture system connected to NMP(Networked Media Processor)

Specifications

Specification	
CPU	Quad-cord, Main frequency 1.6GHz
GPU	Quad-cord
RAM	2G
ROM	16G
O.S.	Android 10
Screen	10-inch 1280*800 IPS
Touch	Capacitive screen with tempered glass, 10-point touch
	Optical bonding
I/O Port	RJ45*1 (PoE supported)
	USB2.0 *3
	Type-C OTG *1
	Audio (3.5mm) *1
	DC (12V) *1
Physical button	Power*1
NFC	Supported
Dimension	244*171.5*28mm(L*H*W)
Working temperature	-20°C to 70°C
Working humidity	<85%
Installation	Desktop stand

Dimensions





Features

- Support wireless transmission up to 40 meters.
- UHF frequency band, anti-interference.
- LCD screen to check the signal strength, battery power, connected channel and other information.
- Support up to 24 channels connection without interference
- One channel supports simultaneous connection of two wireless microphones-one handheld microphone, one lapel microphone.
- Automatic frequency matching when powers on, simple operation.
- Lapel mic supports point-to-multipoint dynamic access, so that each teacher can own one lapel mic to pair with any NMP in any classroom, convenient for private use and good for personal hygiene.

Specifications

Parameter	Handheld Microphone
Receiving sensitivity	$\geq -85\text{dBm}$
Receiver working current	5V/180mA
Frequency range	640MHz ~690MHz
Sensitivity	51dB $\pm$ 3dB(0dB=1V/Pa 1 KHz)
Frequency response	50Hz~15KHZ
Microphone type	Dynamic cardioid microphone
SNR	$\geq -65\text{dB}$
Transmit power	$> 20\text{dBm}$
Distortion	$< 0.5\%$
Effective distance	$< 40\text{m}$
Latency	$< 5\text{ms}$
Operating temperature	-25C°-60C°
Power supply	2*AA batteries
Microphone working current	100mA@3V
Battery lifetime	12 Hours

Specifications

Parameter	Lapel microphone
Receiving sensitivity	$\geq -85\text{dBm}$
Receiver working current	5V/180mA
Frequency range	640MHz ~690MHz
Sensitivity	51dB $\pm$ 3dB(0dB=1V/Pa 1 KHz)
Frequency response	50hz~15KHZ
Microphone type	Condenser microphone
SNR	$\geq 105\text{dB}$
Transmit power	16~25dBm
Distortion	$<0.5\%$
Effective distance	$<40\text{m}$
Latency	$<5\text{ms}$
Operating temperature	-25C°-60C°
Power supply	2*AA batteries
Microphone working current	200mA@3V
Battery lifetime	5 Hours



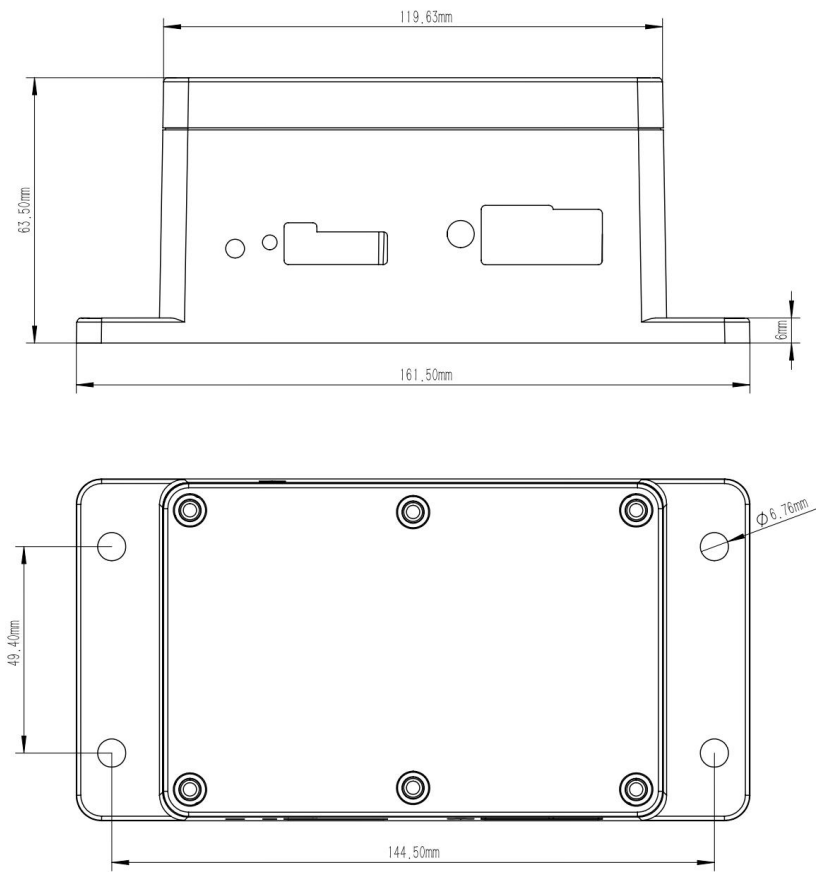
Features (CBX100)

- **Wireless Connection**
 - Connect to Q-NEX NMP through 2.4GHz wireless transmission.
 - Convenient installation without wiring or change of existing electric wires in the room.
- **Unified Control**
 - Remote control devices anytime and anywhere on unified Q-NEX Console through Internet.
 - Support device control by Touch Panel (CPL20), mobile APP or Web browser on PC instantly or on schedule.
- **Multiple Control Interface**
 - Wireless control of various devices with RS232, IR and Relay interfaces supported.
 - Each CBX can apply one of the controls of RS232, IR and Relay.
- **Device Control Extension for Q-NEX NMP**
 - Extended control interfaces for NMP, to allow more devices being controlled by NMP.
 - Each NMP can get 4 more CBXs connected.

Specification

Specification	
AC power supply	90-300VAC
Input power consumption	<3W
Working environment	-20°C~85°C
WiFi	IEEE 802.11 b/g/n 1T1T 2.4GHz
Relay interface	SPDT
Maximum load (resistance)	250VAC, 10A
Maximum switching power	2500VA
Communication interface	1*RS232, 1*IR remote control

Dimension





Get in touch with the simple but functional system:

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