Nobi Ceiling

Appliance sheet | Product requirements

The following parameters must be met to ensure smooth operation for Nobi:

Ideal installation height		For optimal performance and safety, it is recommended to install the Nobi smart lamp at a sensor height (=height of the black dot on the lamp) ranging between 6.9 feet and 7.5 feet (2.10 to 2.29 m). This installation height ensures that Nobi's artificial intelligence operates at its best.
Internet volume & bandwidth		Data usage per 100 devices: 400 GB (upload and download combined) Bandwith requirements per 100 devices: Download: 60 Mbps - Upload: 30 Mbps Both values (Internet volume and bandwidth) scale linearly with the number of devices. Please ensure a minimum upload bandwidth of 5 Mbps regardless of the number of devices.
Firewall settings The following ports should be opened	# Cloud connection	*.nobi.cloud and nobi.cloud: port 443 (TCP) *.nobi.cloud: port 5671 (TCP)
	#WebRTC communication	*.livekit.cloud: port 443 (TCP) *.turn.livekit.cloud: port 443 (TCP) *.host.livekit.cloud: port 3478 (UDP)
	# Video uploads	For EU customers: nobi-data-production-eu-production.s3.eu-central-1.amazonaws.com For US customers: nobi-data-production-us-production.s3.us-east-1.amazonaws.com nobi-data-production-us-production.s3.amazonaws.com
	# NTP	time1.google.com, time2.google.com, time3.google.com, time4.google.com: port 123 (UDP)
	# Debugging	*.nobi.cloud: port 2222
	# SIP signaling	nobi.sip.us1.twilio.com: port 5060 (TCP + UDP) nobi.sip.us1.twilio.com: port 5061 (TCP)
	# SIP media	168.86.128.0/18: port range 10.000-60.000 (UDP)
	# Software updates	fleet.nobi.cloud: port 443 (TCP) fleet-updates.nobi.cloud: port 443 (TCP)
The WLAN must		Not be publicly accessible without a password (security consideration). Ideally be uniform across the entire department.
The WLAN may		Not require any usage terms to be accepted.
The signal strength must be		Between -30 dBm and -67 dBm in decibel milliwatt (refer to the reference table). Affected by structural measures, where different wall thicknesses can absorb different signal levels. Therefore, the signal must be measured in each room.

Reference table signal strength

30 dBm
Maximum signal strength.
At this measurement level, an AccessPoint is likely to be nearby.

50 dBm
Excellent signal strength.

60 dBm
Good signal strength.

67 dBm
Minimal signal strength required
for applications that need a consistently stable WLAN signal.

70 dBm
Not a strong signal.
It may be sufficient for checking emails.

80 dBm
Unreliable signal strength.
You can probably connect to the network, but it will be insufficientfor most online applications.

90 dBm
Weak signal strength.