Installation Instructions

eXS 5001A

These instructions cover indoor mounting on a wall or ceiling, as well as outdoor mounting on a wall or a pole.

Parts Needed

The eXS-5001 Wireless NODE™ installation kit consists of the following items:

1. The eXS-5001 NODE
2. Antennas: 1 for Networking (5GHz) & 1 for Access (2.4GHz)
3. AC/DC power converter with PoE jacks
4. Hardware bag with "T" and RJ-45 weather gasket

Items procured locally are:

5. Cat5 cable terminated to the appropriate length, fabricated locally
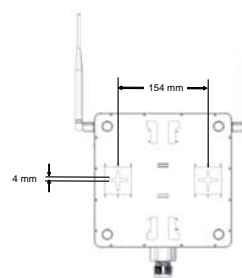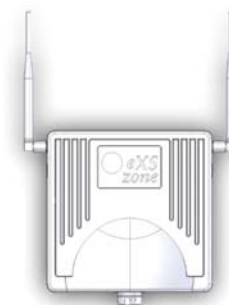6. AC power cord purchased locally with a "computer" connector (IEC60320/c13, see photo).

Wall Mount

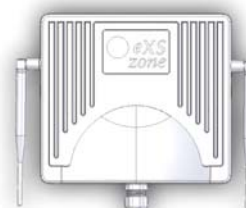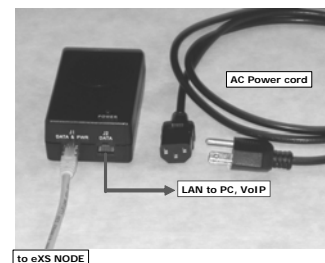The eXS NODE can be mounted indoors on the specified wall as follows.

1. Mark 2 holes 154mm apart. The Mounting Template may help mark these holes.
2. Insert the round-head screws, maximum 4 mm diameter shaft, leaving about 10mm space from the wall to the underside of the screw head.

3. Hang the eXS NODE on these screws. Be sure the NODE is not loose.
4. Be sure both antennas are up & vertical. It there is interference above the NODE, rotate them downward so they are down & vertical.
5. Run a length of Cat5 LAN cable from this location to where the AC/DC converter will be plugged in. Maximum length is 100 meters. The RJ-45 plug should be wired per the diagram.
6. Insert the cable plug into the RJ-45 jack.
7. The cable bushing and cap are generally used only for outdoor installations.
8. Use round-cable staples to hold the cable in place, spacing them about 1 meter apart or as needed. Allow 20-30mm at bends in the cable, to avoid pinching. [Sharp bends in Cat5 cable may cause data errors].
9. Allow about 150-200mm slack cable at the power converter.
10. Plug the AC/DC converter into the AC outlet.
11. Verify that there is a wireless connection to the Internet before plugging a PC or LAN into the wired jack.
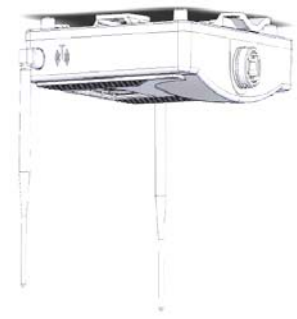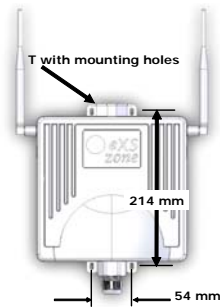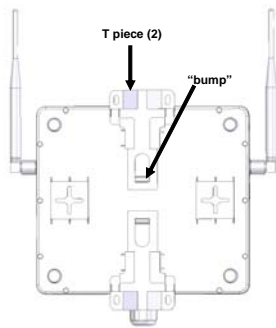
Ceiling Mount

1. Install the 2 "T" pieces to the bottom of the NODE, sliding them into the groves until they snap over the bump.
2. Mark & drill the 4 holes. The holes are 54x214mm apart.
3. Mount the eXS NODE using the 4 screws. There is a little slot in the T's to adjust for holes that are slightly off center.
4. Rotate the antennas 90 degrees so they are down & vertical

154 mm

4 mm

1 2 3 4 5 6 7 8

Pin assignments clip down (TIA568A):
1&2) Transmit Data (green)
3&6) Receive Data (orange)
4&5) Positive DC voltage (blue)
7&8) Negative DC Voltage (brown)

AC Power cord

LAN to PC, VoIP

to eXS NODE

T piece (2)

"bump"

T with mounting holes
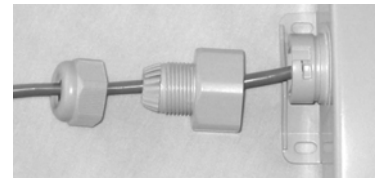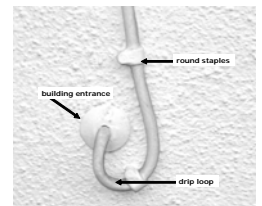
214 mm

54 mm

Outdoor Mounting

The *e*XS NODE is weatherproof and can be mounted outdoors.

1. Install the 2 "T" pieces to the bottom of the NODE, sliding them into the groves until they snap over the bump.
2. Mark & drill the 4 holes. The holes are 54x214mm apart.
3. Mount the *e*XS NODE using the 4 screws. There is a little slot in the T's to adjust for holes that are slightly off center.
4. Verify that the NODE will not move in the wind.
5. Be sure the 2 antennas are vertical. If there is interference above, rotate them downward.
6. Terminate the PoE cable. The wiring diagram is the same as the indoor installation, but outdoor-rated cabling should be used.
7. Pull the cable connector through the cap and through the weather bushing.
8. Plug the RJ-45 plug into the RJ-45 jack on the housing.
9. Push and twist the weather bushing onto the housing.
10. Tighten the Compression Nut so it is weather-tight.
11. When the cable enters the building, create a "drip loop".
12. Use round-cable staples to hold the cable in place, spacing them about 1 meter apart. Allow 20-30mm at bends in the cable, to avoid data errors.
13. If the cable is not pre-terminated, cut it to length at the AC/DC converter location. Allow about 150-200mm slack cable. Install the RJ-45 plug.
14. Plug the AC/DC converter into the AC outlet indoors and plug in the Cat5 cable.

round staples

building entrance

drip loop

Pipe Mounting

Pipe or pole mounting is accomplished with two straps holding the "T". For small pipes, a simple hose clamp will work well (e.g., stainless steel, 23-70mm long, 10-14mm wide). For larger utility poles, use the same straps used to mount signs to the poles.

Antenna Options

On occasion there is a need for other types of antennas. If these have been ordered and assembled, then they will have their own installation instructions.

The NODE has icons next to the antenna connectors for the Network and Access ports respectively.

Hose clamps (top & bottom)

Verification

Verify that there is a wireless connection to the Internet before attaching PC to the LAN jack.

Questions or comments? Please write to: info@exsnetworks.com

Network icon

Access icon