


# Installation manual standard/external antenna **UNICOM 300**

UNICOM 300 comes standard with the PulseLARSEN antenna (NN2753), unless otherwise agreed.



If the signal strength is not sufficient, UNICOM 300 can be equipped with an external antenna. Wigbersma & Sikkema has selected two external omni directional antennas that can be used. These are available with two lengths of cable: 5 and 10 meters. See the table below. The antennas are supplied with mounting material and grommet for sealing.

This manual only discusses installation of an external antenna. Read the corresponding UNICOM 300 manual before installing UNICOM 300 and put into use.


## Standard antenne

Order number	: <b>NN2753</b>	
Cable length	: n.v.t.	
Frequencies	: 700/850/900/1800/1900/2100/2600 MHz	
Max. Gain	: 1 dBi @ 824 – 960 MHz 2 dBi @ 1710 – 2600 MHz	
Height	: 50 mm	

## Omni directional antennas

Order number 5 m CELF200 cable: <b>N2755</b> Order number 10 m CELF200 cable: <b>N2756</b> Frequencies : 800/868/900/1800/2100/2600 MHz Gain: : 2 dBi @ 700 - 960 MHz 3,32 to 4,64 dBi @ 1700 - 2700 MHz Height (approx.) : 240 mm	
Order number 5 m CELF200 cable: <b>N2750</b> Order number 10 m CELF200 cable: <b>N2751</b> Frequencies : 700/800/868/900/1800/2100/2600 MHz Gain : 0-3 dBi (frequency dependent) Dimensions : round 78.8mm, Height 21.3mm Total height 34.5mm	

## Grommet

Order number: <b>NN2754</b>  Grommet is supplied mounted on the cable.	
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## 1. Explosion safety instructions (Ex)



**WARNING**

UNICOM 300 is approved for use inside the explosion-hazardous environment. UNICOM 300 is equipped with intrinsically safe circuits, which may be connected to equipment set up in explosion-hazardous environments.

Should you have any questions or need clarification regarding explosion safety with respect to UNICOM 300, please contact Wigersma & Sikkema (for this, please see the data at the last page).



General additional instructions on explosion safety:

1. If, for whatever reason, a mounted connecting cable has to be disconnected and reinstalled, it must be checked that the cable is correctly mounted, that no loose wires are present and that the cable gland is properly secured.
2. If the housing is opened, it must be ensured that no moisture enters the housing.
3. If there are any defects, UNICOM 300 should be repaired by Wigersma & Sikkema.

Additional instructions with regard to explosion safety requirements regarding installation of external antennas.

4. It is allowed to use any external antenna in combination with the UNICOM 300, however it is preferable to use the prescribed types to ensure proper operation of the UNICOM in combination with the external antenna.
5. Shortening the cable of the external antenna is not permitted.
6. Prevent damaging the cable of the external antenna during installation. If the cable is damaged, the antenna should be replaced as a unit with a non-damaged unit.
7. If the external antenna is placed in the Ex zone, the antenna must not have a gain greater than 2 dB.

## 2. Installation instructions of the external antenna

	<b>PLEASE NOTE</b>	Before installing the external antenna, first read the <i>Explosion safety instructions (Ex)</i> .
		Treat the cable with care. Prevent the cable from sharp bends or the insulation from being damaged. If the cable is damaged, replace the entire antenna.
	<b>ESD</b>	Electrostatic discharges can cause damage to internal electrical components if no precautions are taken. ESD is caused by static electricity and the damage caused is usually permanent.

- If necessary, unscrew the standard antenna.
- Slide the pre-assembled grommet of the external antenna back so that the SMA gland is free.
- Mount the SMA cable gland of the external antenna on the free connection.
- Slide the grommet back over the SMA connector



Mount the external antenna in the most convenient location. Ensure adequate cable routing. The antenna works optimally if it is placed vertically (omni directional antenna).

If necessary, carry out a check on accessibility using the central system.



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