

## Safety requirements

- a) The remote feeding system of DAR system has been classified as a RFT-V circuit. The RPF provides 320Vdc nominal voltage line to line ( $\pm 160$ Vdc nominal voltage line to earth).
- b) Effective capacitances (including part tolerance)
- between the connection points for the conductors of the Telecommunication Network
    - RPF** RPF<sub>1</sub> out:  $C_{RPF1} \leq 20.53 \mu\text{F}$  (more RPF channels add +1.2  $\mu\text{F}$ )
    - RPF<sub>1-4</sub> out:  $C_{RPF1-4} \leq 24.13 \mu\text{F}$
    - DAR** RPF1 in:  $C_{BBR1} \leq 1.2 \mu\text{F}$
    - RPF2 in:  $C_{BBR2} \leq 1.2 \mu\text{F}$
  - between the connection point for one conductor of the Telecommunication Network and Earth
    - RPF**  $C_{EBBR} \leq 6.1 \mu\text{F}$
- c) At the time of installation a system assessment shall be carried out to ensure that the:
- $C_{TOTAL1} \leq 100 \mu\text{F}$  between line to line  
where:  
 $C_{TOTAL1} = C_{RPF1-4OUTTOTAL} + C_{RPF1-4INTOTAL} + C_{RPF1-4LINE1-4}$
  - $C_{TOTAL2} \leq 15 \mu\text{F}$  between line to earth
- d) At the time of installation it shall be checked that the voltage rating of the wiring of the Telecommunication Network is adequate for the normal RFT circuit voltage together with the transients.
- e) At the time of installation it shall be checked that the circuits to be connected together are either RFT-C circuits or all RFT-V circuits.

# INSTALLATION GUIDE OF BROADBAND REGENERATOR

## REMOTE SIDE

### DAR

## Physical installation of the box

Necessary tools and accessories:

- (1) cable tie
- (2) 2x wood screws
- (3) 2x raw plugs
- (4) screwdriver w/ Phillips head, PH1
- (5) drilling machine

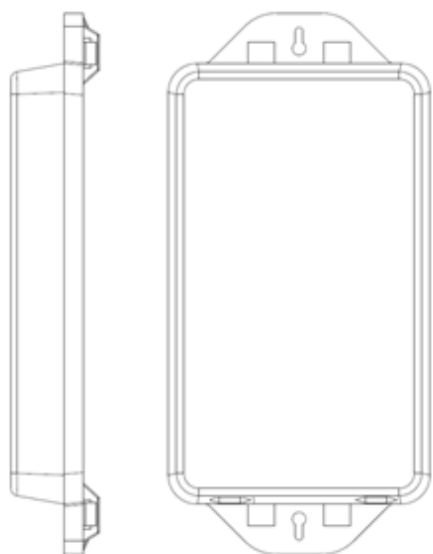


Figure 1.

### Version A – Pole installation

1. Put the box to the pole.
2. Fix it using standard cable ties through the pre-designed holes on the ears.

OPTIONAL:

### Version B – Wall installation

1. Put the box to the wall.
2. Indicate the locations of the upper and lower holes.

*Consider the longest distance between them!*

3. Drill holes into the wall and insert the raw plugs.
4. Fix the upper screw.
5. Hang up the box and fix both screws.

## Electrical installation

The DAR has 2 cable tails with 10 pairs each. The right 10 pairs are for ADSL and RPF connections towards the Exchange, the left 10 pairs are for ADSL connections towards the remote end:

### Right 10 pairs

| Function                       | A wire | B wire |
|--------------------------------|--------|--------|
| ADSL line 1 in (from Exchange) | blue   | white  |
| ADSL line 2 in (from Exchange) | orange | white  |
| ADSL line 3 in (from Exchange) | green  | white  |
| ADSL line 4 in (from Exchange) | brown  | white  |
| power 1                        | grey   | white  |
| power 2                        | grey   | red    |
| RS485                          | blue   | red    |
| Phone                          | green  | red    |

### Left 10 pairs

|                               |        |     |
|-------------------------------|--------|-----|
| ADSL line 1 out (to customer) | blue   | red |
| ADSL line 2 out (to customer) | orange | red |
| ADSL line 3 out (to customer) | green  | red |
| ADSL line 4 out (to customer) | brown  | red |

In case of Power Spectrum Density (PSD) is required, the monitor program must be used via NEM card, RS485 local port or local phone connection.

Notes:

- (1) All unused wires to be cut away and insulated.