

# Additional information on Radionet product configuration

- Radionet ETSI and FCC product version (RN-900) can be used in different configurations
- For FCC RF measurements, all variations of base station + antenna combinations should be measured
- For this reason we developed this model that offers base for building test configuration with Radionet's products
  - RN 900 base station
  - Power supply
  - External 2.4 GHz antennas
    - Link and/or access
  - External 5 GHz antennas
    - Link and/or access

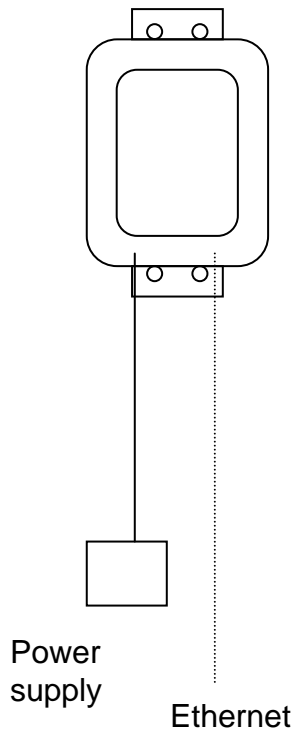
ID	Product set up	Frequency	ETSI	UK	FCC	IC-Canada	
1	1 x 5 GHz integ. ant.	5.470-5.725 GHz	1 W/30 dBm				DFS/TR
2	1 x 5 GHz integ. ant.	5.725-5.850 GHz	25 mW	2 W/33 dBm	4 W/36 dBm	4 W/36 dBm	
3	1 x 5 GHz ext. ant.	same as in modes 1 and 2					
4	2 x 5 GHz ext. ant.	same as in modes 1 and 2					
5	2* 5 GHz (integ.ant. + external antenna)	same as in modes 1 and 2					
6	2,4 GHz ext. ant.	2.4-2.4835 GHz	100 mw/20 dBm	100 mw/20 dBm	1 W/30 dBm	1 W/30 dBm	
7	2 x 2,4 GHz ext. ant.	same as in mode 5					

# ETSI/FCC; 5 GHz radio installation alternatives

## Basic function (1 radio used):

5.470-5.725 or  
5.725-5.850 GHz (FCC version)  
transmission with  
integrated 20 dBi antenna

Access point

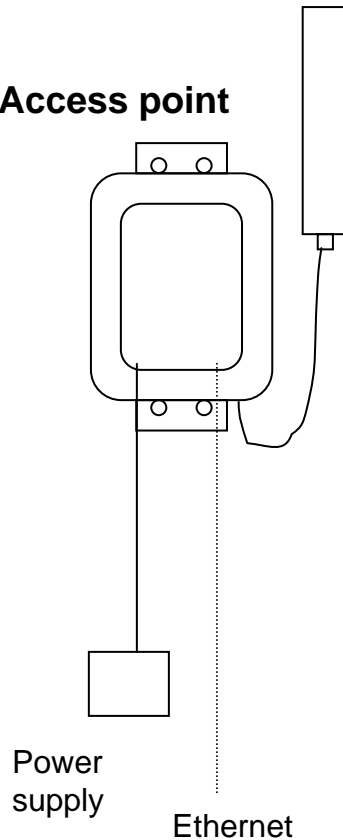


## Extended functionality with external antenna:

(2 radios used), 5.470-5.725 or 5.725-5.850 GHz  
(FCC version) transmission with integrated  
20 dBi antenna  
+ external link (22 dBi) or access antenna (14 dBi)

Access point

External antenna



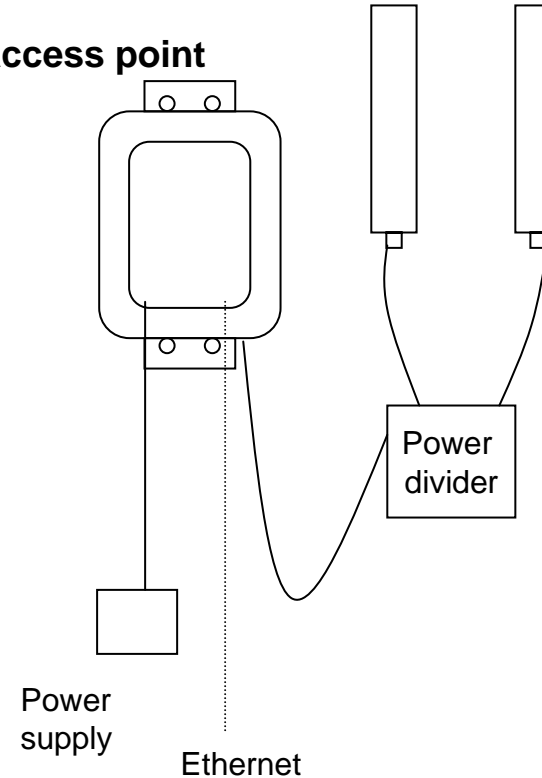
## Extended functionality with external antennas after power divider:

(1-2 radios used), 5.470-5.725 or  
5.725-5.850 GHz (FCC version)  
transmission with integrated  
20 dBi antenna + 2 external link or  
access antenna after a power divider

Access point

External  
antennas

Power  
divider

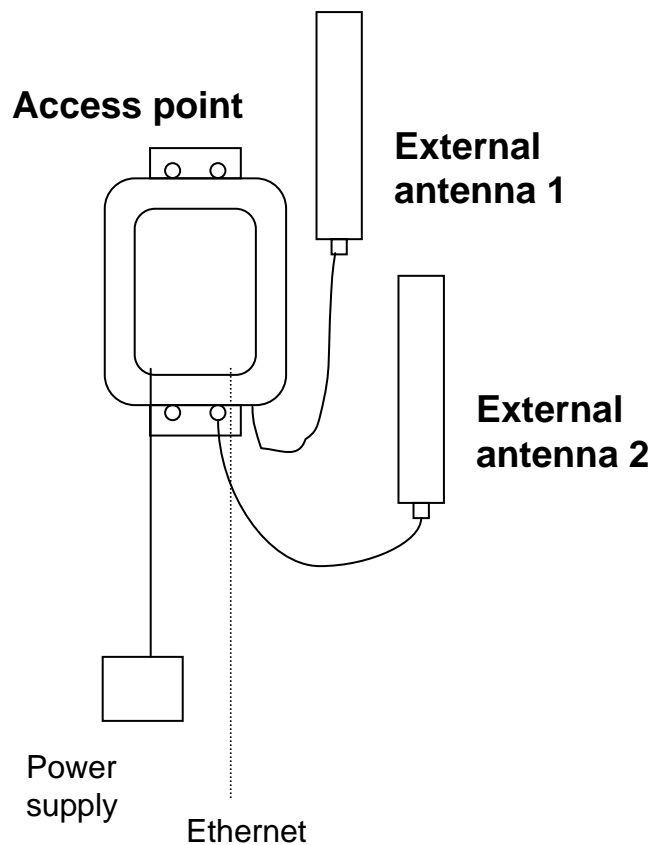


# ETSI/FCC; 2.4 GHz radio installation alternatives

## Extended functionality with external antenna:

(2 radios used), 2.400-2.4835 GHz

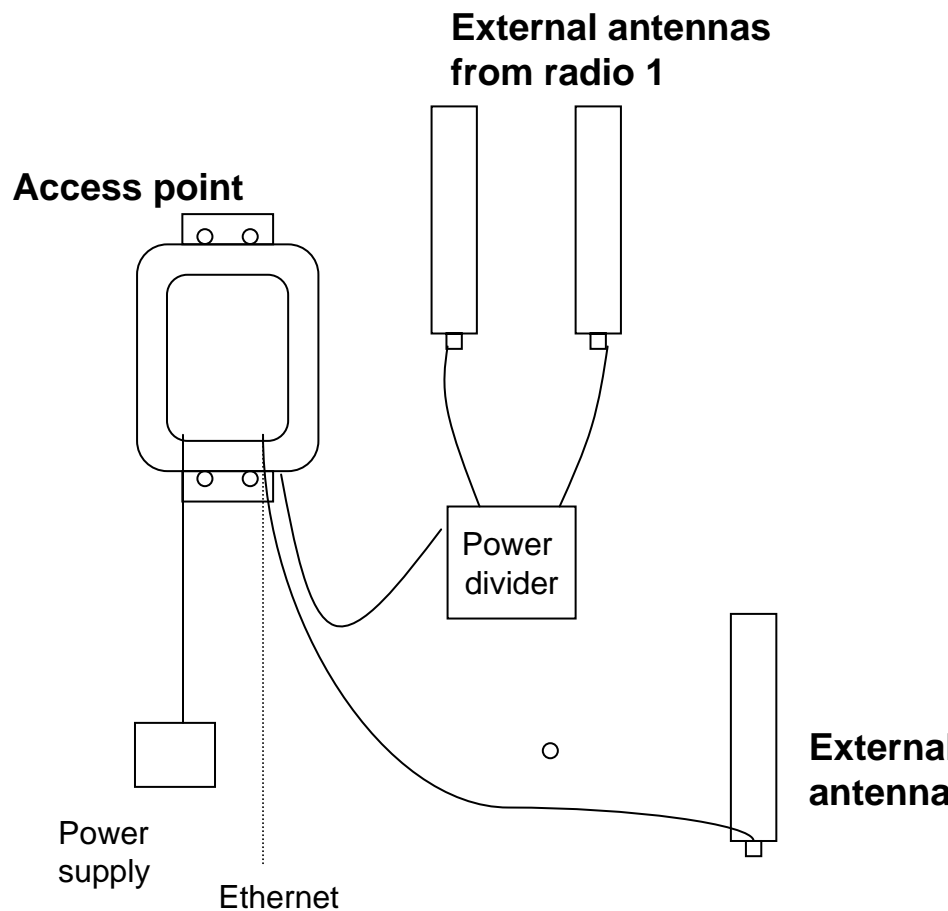
(FCC version) transmission with external 12-14 dBi antennas



## Extended functionality with external antennas after power divider:

(1-2 radios used), 2.4-2.4835 GHz GHz

(FCC version) transmission with external 12-14 dBi antennas after a power divider



# RN 900 measurement configurations in maximum power settings

- Basic function: 1 radio used, 5 GHz
  - FCC mode: max 4W(36 dBm allowed) RN 900 radio max 16 dBm + 20 dBi integrated antenna= 36 dBm (FCC max),
  - ETSI mode: max transmit power from radio allowed to be 10 dBm= 30 dBm, 1 W

# Issues impacting transmit power levels on FCC product versions

- power losses
  - cables 2 dBm
  - power divider 3 dBm