

G.2 Information as required by ETSI EN 301 893 (V2.1.1), clause 5.4.1

In accordance with ETSI EN 301 893, clause 5.4.1, the following information is provided by the manufacturer.

a) The Nominal Channel Bandwidth(s):

Nominal Channel Bandwidth 1: 20 MHz

Nominal Channel Bandwidth 2: 40 MHz

Nominal Channel Bandwidth 3: 80 MHz

Nominal Channel Bandwidth 4: N/A MHz

The associated center frequencies:

For Nominal Channel Bandwidth 1:

for the band 5 150 MHz to 5 350 MHz: 5180 MHz; 5320 MHz;

for the band 5 470 MHz to 5 725 MHz: 5500 MHz; 5700 MHz;

For Nominal Channel Bandwidth 2:

for the band 5 150 MHz to 5 350 MHz: 5190 MHz; 5310 MHz;

for the band 5 470 MHz to 5 725 MHz: 5510 MHz; 5670 MHz;

For Nominal Channel Bandwidth 3:

for the band 5 150 MHz to 5 350 MHz: 5210 MHz; 5290 MHz;

for the band 5 470 MHz to 5 725 MHz: 5530 MHz; 5610 MHz;

For Nominal Channel Bandwidth 4:

for the band 5 150 MHz to 5 350 MHz: 5250 MHz

for the band 5 470 MHz to 5 725 MHz: 5570 MHz

b) For Load Based Equipment that supports multi-channel operation:

- ☐ The LBE equipment supports Option 1 as described in clause 4.2.7.3.2.3
- ☐ The LBE equipment supports Option 2 as described in clause 4.2.7.3.2.3
- The (maximum) number of channels used for multi-channel operation: _____
- These channels are adjacent channels:
 - ☐ Yes ☐ No
- In case of non-adjacent channels, whether or not these channels are in different sub-bands:
 - ☐ Yes ☐ No
- for LBE equipment implementing option 1 (see clause 4.2.7.3.2.3), the number of channels used for multichannel operation when performing the test described in clause 5.4.9.3.2.3.1:

In case of multi-channel operation, further information defining the channels used for these simultaneous transmissions may be required.

c) **The different transmit operating modes (see clause 5.3.3.2) (tick all that apply):**

☒ **Operating mode 1: Single Antenna Equipment**

- a) ☒ Equipment with only 1 antenna
- b) ☐ Equipment with diversity antennas but only 1 antenna active at any moment in time
- c) ☐ Smart Antenna Systems with 2 or more antennas, but operating in a (legacy) mode where only 1 antenna is used

☐ **Operating mode 2: Smart Antenna Systems - Multiple Antennas without beamforming**

- a) ☐ Single spatial stream/Standard throughput
- b) ☐ High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 1
- c) ☐ High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 2

☐ **Operating mode 3: Smart Antenna Systems - Multiple Antennas with beamforming**

- a) ☐ Single spatial stream/Standard throughput
- b) ☐ High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 1
- c) ☐ High Throughput (> 1 spatial stream) using Nominal Channel Bandwidth 2

d) **In case of Smart Antenna Systems or multiple antenna systems:**

- The number of Receive chains: ____1____
- The number of Transmit chains: ____1____
- Equal power distribution among the transmit chains: ☐ Yes ☐ No
- In case of beamforming, the maximum (additional) beamforming gain: _____ dB

NOTE: Beamforming gain does not include the basic gain of a single antenna (assembly).

e) TPC feature available:☐ Yes☒ No**f) For equipment with TPC range:**

The lowest and highest power level (or lowest and highest e.i.r.p. level in case of integrated antenna equipment), intended antenna assemblies and corresponding operating frequency range for the TPC range (or for each of the TPC ranges if more than one is implemented).

TPC range 1: Applicable Frequency Range:☐ 5 150 MHz to 5 350 MHz and 5 470 MHz to 5 725 MHz (Indoor)Simultaneous transmissions in both sub-bands: ☐ Yes ☐ No☐ 5 470 MHz to 5 725 MHz only (Outdoor only)

Indicate whether the power levels specified are Transmitter Output Power levels or e.i.r.p. levels in case of integrated antenna equipment.

Power levels are specified for: ☐ Tx out ☐ e.i.r.p

If more than one transmit chain is present (e.g. in the case of smart antenna systems), the power levels below represent the power settings per active transmit chain (and per sub-band in case of multi-channel operation). **Table G.1: Power levels for TPC range 1**

	Sub-band (MHz)	Operating Mode 1 (dBm)	Operating Mode 2 (dBm)	Operating Mode 3 (dBm)
Lowest setting (P _{low})	5 150 to 5 350	_____	_____	_____
	5 470 to 5 725	_____	_____	_____
Highest setting (P _{high})	5 150 to 5 350	_____	_____	_____
	5 470 to 5 725	_____	_____	_____

Beamforming possible: ☐ Yes ☐ No

Intended Antenna Assemblies:

Table G.2: Intended Antenna Assemblies for TPC range 1

Antenna Assembly name	Antenna Gain (dBi)	Operating Mode	Sub-band (MHz)	Beam forming gain (dB)	e.i.r.p. for P_{low} (dBm)	e.i.r.p. for P_{high} (dBm)
<Antenna 1>	_____	Mode 1	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____
		Mode 2	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____
		Mode 3	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____
<Antenna 2>	_____	Mode 1	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____
		Mode 2	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____
		Mode 3	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____
<Antenna 3>	_____	Mode 1	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____
		Mode 2	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____
		Mode 3	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____

DFS Threshold Level: _____ dBm ☐ at the antenna connector☐ in front of the antenna

TPC range 2: Applicable Frequency Range:
☐ 5 150 MHz to 5 350 MHz and 5 470 MHz to 5 725 MHz (Indoor)

 Simultaneous transmissions in both sub-bands: ☐ Yes

☐ No

☐ 5 470 MHz to 5 725 MHz only (Outdoor only)

Indicate whether the power levels specified are Transmitter Output Power levels or e.i.r.p. levels in case of integrated antenna equipment.

 Power levels are specified for: ☐ Tx out ☐ e.i.r.p.

If more than one transmit chain is present (e.g. in the case of smart antenna systems), the power levels below represent the power settings per active transmit chain (and per sub-band in case of simultaneous transmissions).

	Sub-band (MHz)	Operating Mode 1 (dBm)	Operating Mode 2 (dBm)	Operating Mode 3 (dBm)
Lowest setting (P_{low})	5 150 to 5 350	_____	_____	_____
	5 470 to 5 725	_____	_____	_____
Highest setting (P_{high})	5 150 to 5 350	_____	_____	_____
	5 470 to 5 725	_____	_____	_____

 Beamforming possible: ☐ Yes ☐ No

Intended Antenna Assemblies:

Table G.4: Intended Antenna Assemblies for TPC range 2

Antenna Assembly name	Antenna Gain (dBi)	Operating Mode	Sub-band (MHz)	Beam forming gain (dB)	e.i.r.p. for P_{low} (dBm)	e.i.r.p. for P_{high} (dBm)
<Antenna 1>	_____	Mode 1	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____
		Mode 2	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____
		Mode 3	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____
<Antenna 2>	_____	Mode 1	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____
		Mode 2	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____
		Mode 3	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____
<Antenna 3>	_____	Mode 1	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____
		Mode 2	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____
		Mode 3	5 150 to 5 350	_____	_____	_____
			5 470 to 5 725	_____	_____	_____

DFS Threshold Level: _____ dBm ☐ at the antenna connector☐ in front of the antenna

g) For equipment without a TPC range:**Power Setting 1:** Applicable Frequency Range:
☒ 5 150 MHz to 5 350 MHz and 5 470 MHz to 5 725 MHz (Indoor)

 Simultaneous transmissions in both sub-bands: ☒ Yes ☐ No

☐ 5 470 MHz to 5 725 MHz only (Outdoor only)

Indicate whether the power levels specified are Transmitter Output Power levels or e.i.r.p. levels in case of integrated antenna equipment.

 Power levels are specified for: ☐ Tx out ☒ e.i.r.p.

If more than one transmit chain is present (e.g. in the case of smart antenna systems), the power levels below represent the power settings per active transmit chain (and per sub-band in case of simultaneous transmissions).

Table G.5: Maximum Transmitter Output Power for Power Setting 1

Sub-band (MHz)	Operating Mode 1 (dBm)	Operating Mode 2 (dBm)	Operating Mode 3 (dBm)
5 150 to 5 350	_____	_____	_____
5 470 to 5 725	_____	_____	_____

 Beamforming possible: ☐ Yes ☒ No

Intended Antenna Assemblies:

Table G.6: Intended Antenna Assemblies for Power Setting 1

Antenna Assembly name	Antenna Gain (dBi)	Operating Mode	Sub-band (MHz)	Beam forming gain (dB)	e.i.r.p. (dBm)
<Antenna 1>	--	Mode 1	5 150 to 5 350	_____	—
			5 470 to 5 725	_____	—
		Mode 2	5 150 to 5 350	_____	_____
			5 470 to 5 725	_____	_____
		Mode 3	5 150 to 5 350	_____	_____
			5 470 to 5 725	_____	_____
<Antenna 2>	_____	Mode 1	5 150 to 5 350	_____	_____
			5 470 to 5 725	_____	_____
		Mode 2	5 150 to 5 350	_____	_____
			5 470 to 5 725	_____	_____
		Mode 3	5 150 to 5 350	_____	_____
			5 470 to 5 725	_____	_____
<Antenna 3>	_____	Mode 1	5 150 to 5 350	_____	_____
			5 470 to 5 725	_____	_____
		Mode 2	5 150 to 5 350	_____	_____
			5 470 to 5 725	_____	_____
		Mode 3	5 150 to 5 350	_____	_____
			5 470 to 5 725	_____	_____

DFS Threshold Level: _____ dBm ☐ at the antenna connector☐ in front of the antenna

Power Setting 2: Applicable Frequency Range:
☐ 5 150 MHz to 5 350 MHz and 5 470 MHz to 5 725 MHz (Indoor)

 Simultaneous transmissions in both sub-bands: ☐ Yes ☐ No

☐ 5 470 MHz to 5 725 MHz only (Outdoor only)

Indicate whether the power levels specified are Transmitter Output Power levels or e.i.r.p. levels in case of integrated antenna equipment.

 Power levels are specified for: ☐ Tx-out ☐ e.i.r.p.

If more than one transmit chain is present (e.g. in the case of smart antenna systems), the power levels below represent the power settings per active transmit chain (and per sub-band in case of simultaneous transmissions).

Table G.7: Maximum Transmitter Output Power for Power Setting 2

Sub-band (MHz)	Operating Mode 1 (dBm)	Operating Mode 2 (dBm)	Operating Mode 3 (dBm)
5 150 to 5 350	_____	_____	_____
5 470 to 5 725	_____	_____	_____

 Beamforming possible: ☐ Yes ☐ No

Intended Antenna Assemblies:

Table G.8: Intended Antenna Assemblies for Power Setting 2

Antenna Assembly name	Antenna Gain (dBi)	Operating Mode	Sub-band (MHz)	Beam forming gain (dB)	e.i.r.p. (dBm)
<Antenna 1>	_____	Mode 1	5 150 to 5 350	_____	_____
			5 470 to 5 725	_____	_____
		Mode 2	5 150 to 5 350	_____	_____
			5 470 to 5 725	_____	_____
		Mode 3	5 150 to 5 350	_____	_____
			5 470 to 5 725	_____	_____
<Antenna 2>	_____	Mode 1	5 150 to 5 350	_____	_____
			5 470 to 5 725	_____	_____
		Mode 2	5 150 to 5 350	_____	_____
			5 470 to 5 725	_____	_____
		Mode 3	5 150 to 5 350	_____	_____
			5 470 to 5 725	_____	_____
<Antenna 3>	_____	Mode 1	5 150 to 5 350	_____	_____
			5 470 to 5 725	_____	_____
		Mode 2	5 150 to 5 350	_____	_____
			5 470 to 5 725	_____	_____
		Mode 3	5 150 to 5 350	_____	_____
			5 470 to 5 725	_____	_____

DFS Threshold Level: _____ dBm ☐ at the antenna connector☐ in front of the antenna**h) The DFS related operating mode(s) of the equipment:**

- ☐ Master
- ☐ Slave with radar detection
- ☒ Slave without radar detection

If the equipment has more than one operating mode, tick all that apply.

i) User access restrictions (please check box below to confirm):

- ☒ The equipment is constructed to comply with the requirements contained in clause 4.2.9 in ETSI EN 301 893 V2.1.1

j) For equipment with Off-Channel CAC functionality:

The equipment has an "Off-Channel CAC" function: ☐ Yes ☒ No

If yes, specify the "Off-Channel CAC Time"

- For channels outside the 5 600 MHz to 5 650 MHz range: _____ hours
- If applicable, for channels (partially) within the 5 600 MHz to 5 650 MHz range: _____ hours

k) The equipment can operate in ad-hoc mode:

- ☐ no ad-hoc operation
- ☒ ad-hoc operation in the frequency range 5 150 MHz to 5 250 MHz without DFS
- ☐ ad-hoc operation with DFS

If more than 1 is applicable, tick all that apply.

l) Operating Frequency Range(s):

Range 1: ☒ 5 150 MHz to 5 350 MHz and 5 470 MHz to 5 725 MHz

Range 2: ☐ 5 470 MHz to 5 725 MHz

Range 3: ☐ 5 150 MHz to 5 250 MHz (ad-hoc without DFS)

Range 4: ☐ other, please specify _____.

If the equipment has more than one Operating Frequency Range, tick all that apply.

m) The extreme operating temperature and supply voltage range that apply to the equipment:☐ -20 °C to +55 °C (Outdoor & Indoor usage)☒ 0 °C to +35 °C (Indoor usage only)☐ Other: -10 °C to +35 °C

The supply voltages of the stand-alone radio equipment or the supply voltages of the combined (host) equipment or test jig in case of plug-in devices:

Details provided are for the:

☒ stand-alone equipment☐ combined (or host) equipment☐ test jig

Supply Voltage

☐ AC mains State AC voltage: Nominal: _____ V☒ DC State DC voltage: Nominal: __3.86__ V

In case of DC, indicate the type of power source:

- ☐ Internal Power Supply
- ☐ External Power Supply or AC/DC adapter
- ☒ Battery Nickel Cadmium
 - ☐ Alkaline
 - ☐ Nickel-Metal Hydride
 - ☒ Lithium-Ion
 - ☐ Lead acid (Vehicle regulated)
 - ☐ Other _____

n) The test sequence/test software used (see also ETSI EN 301 893 (V2.1.1), clause 5.3.1.2):

The DUT uses the Device bulid-in engneer test software to enter the test mode to complete the test.

o) Type of Equipment:

- ☒ Stand-alone
- ☐ Combined Equipment (Equipment where the radio part is fully integrated within another type of equipment)
- ☐ Plug-in radio device (Equipment intended for a variety of host systems)
- ☐ Other _____.

p) Adaptivity (Channel Access Mechanism):

- ☐ Frame Based Equipment
- ☒ Load Based Equipment

q) With regards to Adaptivity for Frame Based Equipment

- ☐ The Frame Based Equipment operates as an Initiating Device
- ☐ The Frame Based Equipment operates as an Responding Device
- ☐ The Frame Based Equipment can operate as an Initiating Device and as a Responding Device

The Frame Based Equipment has implemented the following Fixed Frame Period(s):

_____. ms

_____. ms

_____. ms

r) With regards to Adaptivity for Load Based Equipment/

- ☐ The Load Based Equipment operates as a Supervising Device
- ☒ The Load Based Equipment operates as a Supervised Device
- ☐ The Load Based Equipment can operate as a Supervising and as a Supervised Device
- ☐ The Load Based Equipment makes use of note 1 in table 7 or note 1 in table 8 of ETSI EN 301 893 V2.1.1
- ☐ The Load Based Equipment , when operating as a Supervising Device, makes use of note 2 in table 7 of ETSI EN 301

893 V2.1.1

The Priority Classes implemented by the Load Based Equipment

When operating as a Supervising Device

- ☐ Priority Class 4 (Highest priority)
- ☐ Priority Class 3
- ☐ Priority Class 2
- ☐ Priority Class 1 (Lowest priority)

When operating as a Supervised Device

- ☐ Priority Class 4 (Highest priority)
- ☐ Priority Class 3
- ☒ Priority Class 2
- ☐ Priority Class 1 (Lowest priority)

☐ The Load Based Equipment operates as an Initiating Device

☒ The Load Based Equipment operates as an Responding Device

☐ The Load Based Equipment can operate as an Initiating Device and as a Responding Device

With regard to Energy Detection Threshold, the Load Based Equipment has implemented either option 1 of clause 4.2.7.3.2.5 of ETSI EN 301 893 V2.1.1 or option 2 of clause 4.2.7.3.2.5 of ETSI EN 301 893 V2.1.1:

☒ Option 1

☐ Option 2

Specify which protocol has been implemented:

☒ IEEE 802.11™

☐ Other: _____

- s) **The equipment supports a geo-location capability as defined in clause 4.2.10 of ETSI EN 301 893 V2.1.1:**

☐ Yes ☒ No

- t) **The minimum performance criteria (see ETSI EN 301 893 V2.1.1, clause 4.2.8.3) that corresponds to the intended use of the equipment:**

__The minimum performance criterion shall be a PER of less than or equal to 10 % _____.

- u) **The theoretical maximum radio performance of the equipment (e.g. maximum throughput) (see ETSI EN 301 893 V2.1.1, clause 5.4.9.3.1):**

_____.

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