

BELGIUM	Radio Interface Specification	SRD/UWB/material sensing devices	B21-08-rev	V2.1 - 21/04/2015
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	Nr	Parameter	description	Comments
Normative part	1	Radiocommunication Service	Mobile	
	2	Application	UWB applications	UWB usage for material sensing devices
	3	Frequency band	3400-3800 MHz	Harmonised radio spectrum for ultra-wideband technology (Decision 2014/702/EU) amending decisions 200
	4	Channelling		
	5	Modulation/Occupied bandwidth		
	6	Direction/Separation		
	7	Transmit power/Power density	Maximum mean power spectral density (e.i.r.p) - 50 dBm/MHz Maximum mean power spectral density (e.i.r.p) in the horizontal plane (- 20° to 30° elevation) - 70 dBm/MHz Non-fixed installations Maximum mean power spectral density (e.i.r.p) -50 dBm/MHz	Mitigation techniques and special conditions for UWB as defined in the annex of the European Commission Decision 2014/702/EU are applicable,
	8	Channel access and occupation rules	Fixed installation: the transmitter shall implement a TPC with a dynamic range of 10 dB (harmonized standard EN 302 498-2 for ODC (Object Discrimination and Characterisation) applications) Non-fixed installations: Transmitter-on only if manually operated with a non-locking switch plus being in contact or close proximity to the investigated material and the emissions being directed into the direction of the object	
	9	Authorisation regime	Licence exempt	Operation on NIB/NPB (Non interference basis/ Non protection basis)
	10	Additional essential requirements	The transmitter has to switch off if the machine is not running, 'running sensor' Non-fixed installations must fulfil the following requirement for total radiated power spectral density: the total radiated power spectral density has to be 5 dB below the maximum mean power spectral density; Non	The compliance for non-fixed installations has to be ensured with the device on a representative structure of the investigated material (e.g. representative wall as defined in ETSI EN 302 435-1 or ETSI EN 302 498-1)
	11	Frequency planning assumption	The peak power (in dBm) measured in a bandwidth of 50 MHz shall be less than a limit that is obtained by adding a conversion factor (25 dB) to the 'maximum mean power spectral density' (in dBm/MHz) limit.	
Informative part	12	Planned Change		
	13	Reference	Decision 2007/131/EC; Decision 2009/343/EC; Decision 2014/702/EU, ECC/DEC/(06)04	Only the version(s) mentioned in the most recent list of Harmonised Standards under the R&TTE directive as published by the European Commission in the OJEU can be used to enjoy presumption of conformity.
	14	Notification number		
	15	Remarks	Class 1 according Decision 2000/299/EC	