

COMMERCIAL-IN-CONFIDENCE

SAR EXCLUSION DOCUMENT

Document 75944487-08 Issue 01

Sepura SC2124 Bluetooth 2.4 GHz Transmitter:

ISED RSS-102 Exemption Limits for Routine Evaluation – SAR Evaluation (RSS-102 Section 2.5.1)

Up to 6 GHz – Separation Distance ≤ 200 mm

The SAR evaluation exemption is determined by comparison of the output power level (adjusted for tune-up tolerance) for the specified comparison distance to the limit given in RSS-102 Table 1.

SAR Exclusion Result:

Frequency (MHz)	Maximum Power EIRP (Tune up Value) * (mW)	Test Separation Distance (mm) **	Exemption Limit *** (mW)	SAR Test Exclusion (Yes/No)
2402	11.65	50	309	Yes
2480	11.65	50	309	Yes

*Tune-up value is the maximum declared output power (EIRP) of the device.

**Test separation distance refers to the minimum test separation distance based on the smallest distance between the antenna and radiating structures or the outer surface of the device, according to the most conservative exposure condition for the applicable module or host platform test procedure requirements, to any part of the body or extremity of a user or bystander.

*** Select power from RSS-102 Table 1 for the applicable frequency and separation distance. For controlled use devices where the 8 W/kg for 1 gram of tissue applies, the exemption limits for routine evaluation in Table 1 are multiplied by a factor of 5. For limb-worn devices where the 10 gram value applies, the exemption limits for routine evaluation in Table 1 are multiplied by a factor of 2.5. If the operating frequency of the device is between two frequencies located in Table 1, linear interpolation shall be applied for the applicable separation distance.

The SAR exclusion threshold has been evaluated using the method described above from information supplied by the manufacturer. Based on the evaluation above, the EUT is categorically excluded from SAR testing.

Approved by

Simon Bennett
Authorised Signatory

Date 12 February 2019



Manufacturer's Declaration of Product information (extract):

Product Description:	Portable TETRA terminal
Model number:	SC2124

If more than one Frequency Band is supported please confirm which combinations of bands are capable of Simultaneous Transmit.

Frequency Band 1: Bluetooth

Antenna length (cm):	Integral and internal	Centimetres (cm)
Frequency range:	2402 - 2480	
Bottom frequency:	2402	MHz
Middle frequency:	2441	MHz
Top frequency:	2480	MHz

Maximum power (input to the antenna including a tolerance):	0.00655	W
Antenna gain (or maximum gain allowed):	2.5	dBi

Separation distance from antenna to the user/bystander:	~5cm	cm
Transmitter Duty Cycle:	77.54	%

Note: The power output EIRP (Equivalent Isotropic Radiated Power) is: $P_{EIRP} = P_o \times G_i = 6.55 \text{ mW} \times 1.778 = 11.65 \text{ mW}$.