Ref: Nemko test report no: 204805B
Espoo 31.03.2012

Equipment under test:

Remote control: RC917FHH/TR02 915 MHz Transceiver
Manufacturer: Scanreco Industrielektronik

RF Exposure Portable

The following data is from test rapport:

Maximum measured output power = 108.6 mW peak (from test report).
But according to the user manual max 18dBm (63 mW) will be used for the handy remote control units near the persons.
Transmission duration = 48.4 msec, this is 0.0484 sec
Number of hops in one hop cycle 50
Duration of hop cycle 2.5 sec
Average = 63 * (0.0484 * 50 / 2.5) = 61 mW
This is below the threshold 60/f(GHz) of section 2) a) i) of 447498 D01 Mobile Portable RF Exposure v04 , which is 60/0.92795 = 64,66 mW.

This filing is a limited modular approval for installation of this module by the manufacturer into their own products. The final application is industrial radio remote control products. The internal antenna will always be located at least 2.5 cm from the nearest host enclosure wall. The external fixed antenna will be mounted at least 20 cm from nearby persons. Please refer to the user manual. For example; when used on fixed mount unit the antenna is often mounted somewhere high typically on the roof of a truck or lorry. Therefore this configuration will comply with RF exposure requirements.

See attached “MPE Predication”

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density
P = power input to the antenna
G = power gain of the antenna in the direction of interest relative to isotropic
R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal:	20.36	(dBm)
Maximum peak output power at antenna input terminal:	108.6	(mW)
Antenna gain(typical):	3.5	(dBi)
Maximum antenna gain:	2.24	(numeric)
Prediction distance:	20	(cm)
Sourse Based Time Average Duty Cycle:	100	(%)
Prediction frequency:	927.95	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.619	(mW/cm^2)
Power density at prediction frequency:	0.0484	(mW/cm^2)
Power density at prediction frequency:	0.484	(W/m^2)
Margin of Compliance:	11.1	(dB)