

APPENDIX A - SAR MEASUREMENT DATA

Body SAR - PCS Band - GPRS Mode - Back Side of DUT (Lap-held)

Date Tested: 03/04/04

DUT: Itronix Model: IX100x; Type: Rugged Handheld PC with PCS GPRS, 802.11b, & Bluetooth; Serial: 510495001-U5103-0025

Ambient Temp: 24.1 °C; Fluid Temp: 21.8 °C; Barometric Pressure: 102.1 kPa; Humidity: 32%

7.4V, 3.0Ah Li-ion Battery Pack

Communication System: PCS GPRS

RF Output Power: 28.6 dBm (Peak Conducted)

Frequency: 1800.0 MHz; Channel 661; Duty Cycle: 1:2

Medium: M1880 ($\sigma = 1.54$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1590; ConvF(5, 5, 5); Calibrated: 15/05/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Barski Planar; Type: Fiberglass; S/N: 03-01
- Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 94

Body SAR - PCS GPRS - Back Side of DUT (Battery Side) - 0.0 cm Separation Distance - Mid Channel - 1880.0 MHz
Area Scan (10x22x1): Measurement grid: dx=15mm, dy=15mm

Body SAR - PCS GPRS - Back Side of DUT (Battery Side) - 0.0 cm Separation Distance - Mid Channel - 1880.0 MHz
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 0.770 W/kg

SAR(1 g) = 0.508 mW/g; SAR(10 g) = 0.323 mW/g

Reference Value = 19.7 V/m

Power Drift = -0.0202 dB

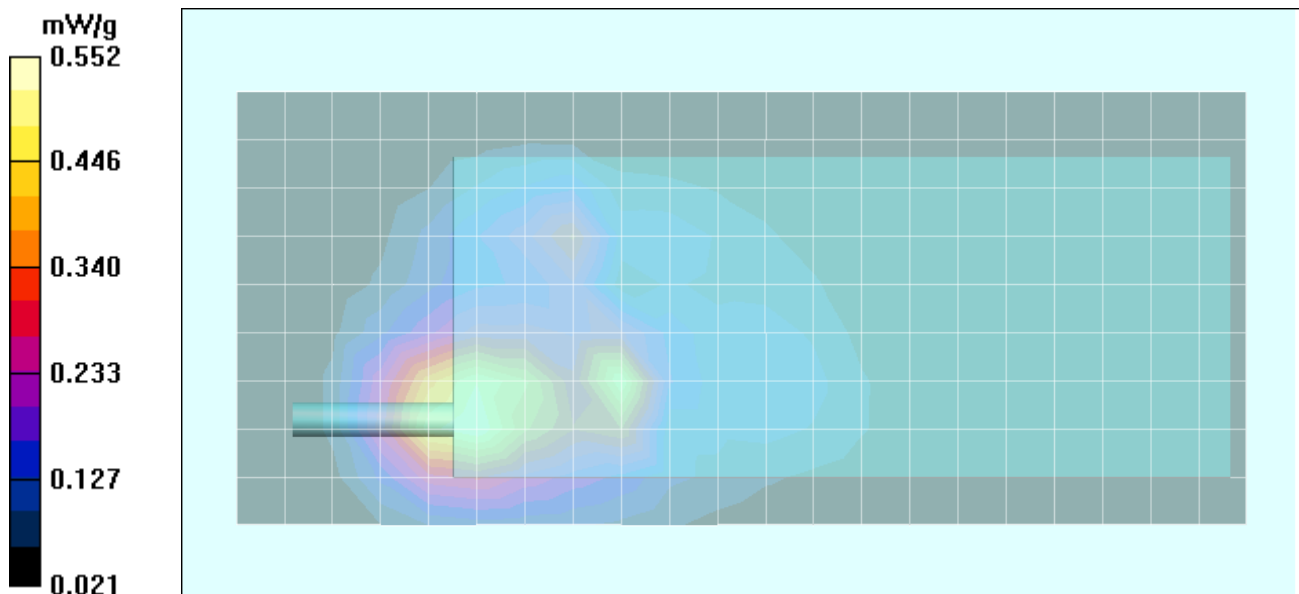
Body SAR - PCS GPRS - Back Side of DUT (Battery Side) - 0.0 cm Separation Distance - Mid Channel - 1880.0 MHz
Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 0.744 W/kg

SAR(1 g) = 0.453 mW/g; SAR(10 g) = 0.257 mW/g

Reference Value = 19.7 V/m

Power Drift = -0.0202 dB



Body SAR - PCS Band - GPRS Mode - Right Side of DUT (Antenna Side)

Date Tested: 03/04/04

DUT: Itronix Model: IX100x; Type: Rugged Handheld PC with PCS GPRS, 802.11b, & Bluetooth; Serial: 510495001-U5103-0025

Ambient Temp: 24.1 °C; Fluid Temp: 21.8 °C; Barometric Pressure: 102.1 kPa; Humidity: 32%

7.4V, 3.0Ah Li-ion Battery Pack

Communication System: PCS GPRS

RF Output Power: 28.6 dBm (Peak Conducted)

Frequency: 1800.0 MHz; Channel 661; Duty Cycle: 1:2

Medium: M1880 ($\sigma = 1.54$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1590; ConvF(5, 5, 5); Calibrated: 15/05/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Barski Planar; Type: Fiberglass; S/N: 03-01
- Measurement SW: DASy4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 94

Body SAR - PCS GPRS - Right Side of DUT (Antenna Side) - 0.5 cm Separation Distance - Mid Channel - 1880.0 MHz
Area Scan (6x22x1): Measurement grid: dx=15mm, dy=15mm

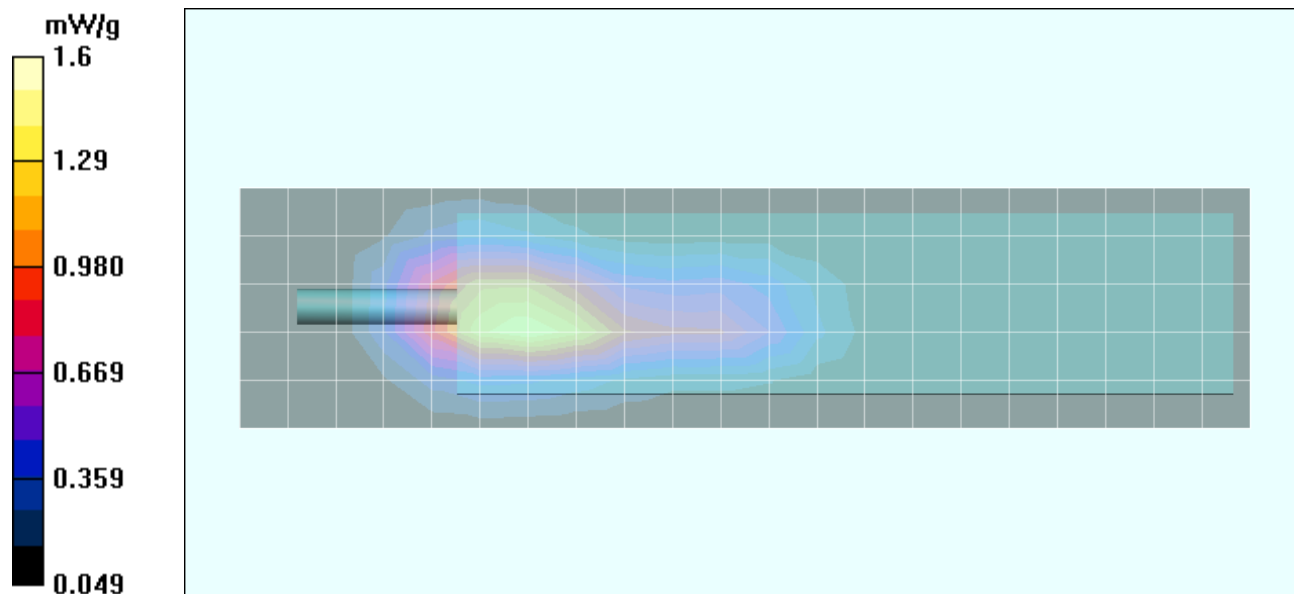
Body SAR - PCS GPRS - Right Side of DUT (Antenna Side) - 0.5 cm Separation Distance - Mid Channel - 1880.0 MHz
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 2.34 W/kg

SAR(1 g) = 1.46 mW/g; SAR(10 g) = 0.869 mW/g

Reference Value = 31.8 V/m

Power Drift = -0.00779 dB



Body SAR - PCS Band - GPRS Mode - Right Side of DUT (Antenna Side)

Date Tested: 03/04/04

DUT: Itronix Model: IX100x; Type: Rugged Handheld PC with PCS GPRS, 802.11b, & Bluetooth; Serial: 510495001-U5103-0025

Ambient Temp: 24.1 °C; Fluid Temp: 21.8 °C; Barometric Pressure: 102.1 kPa; Humidity: 32%

7.4V, 3.0Ah Li-ion Battery Pack

Communication System: PCS GPRS

RF Output Power: 28.7 dBm (Peak Conducted)

Frequency: 1850.2 MHz; Channel 512; Duty Cycle: 1:2

Medium: M1880 ($\sigma = 1.54$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1590; ConvF(5, 5, 5); Calibrated: 15/05/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Barski Planar; Type: Fiberglass; S/N: 03-01
- Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 94

Body SAR - PCS GPRS - Right Side of DUT (Antenna Side) - 0.5 cm Separation Distance - Low Channel - 1850.2 MHz
Area Scan (6x22x1): Measurement grid: dx=15mm, dy=15mm

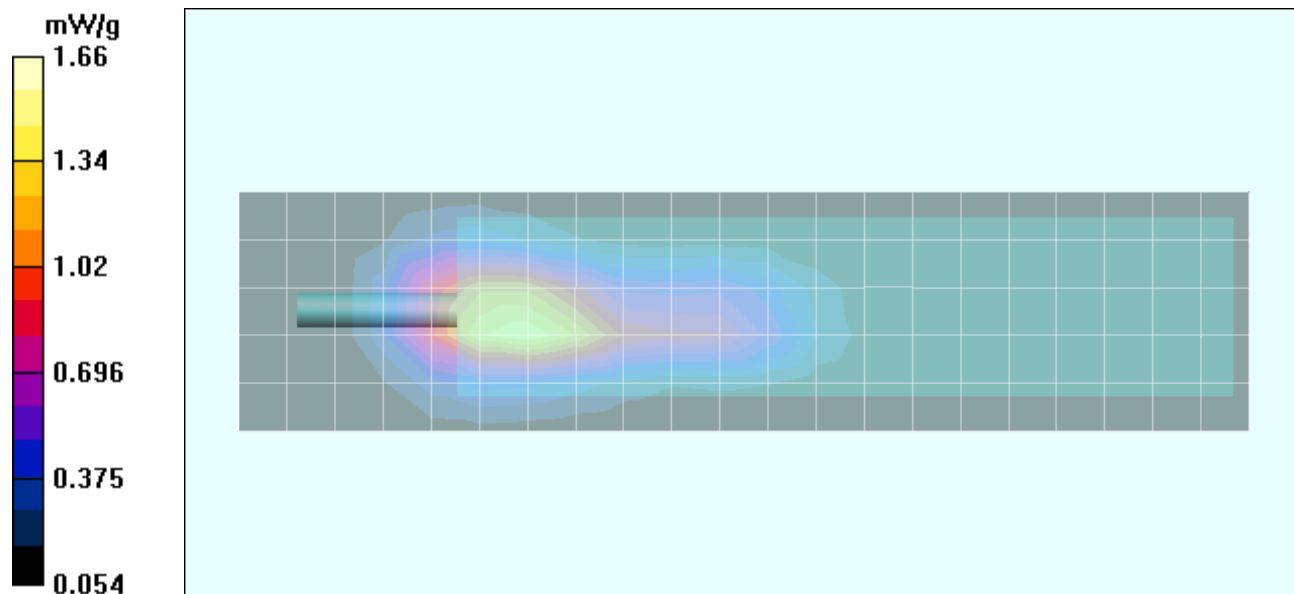
Body SAR - PCS GPRS - Right Side of DUT (Antenna Side) - 0.5 cm Separation Distance - Low Channel - 1850.2 MHz
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 2.42 W/kg

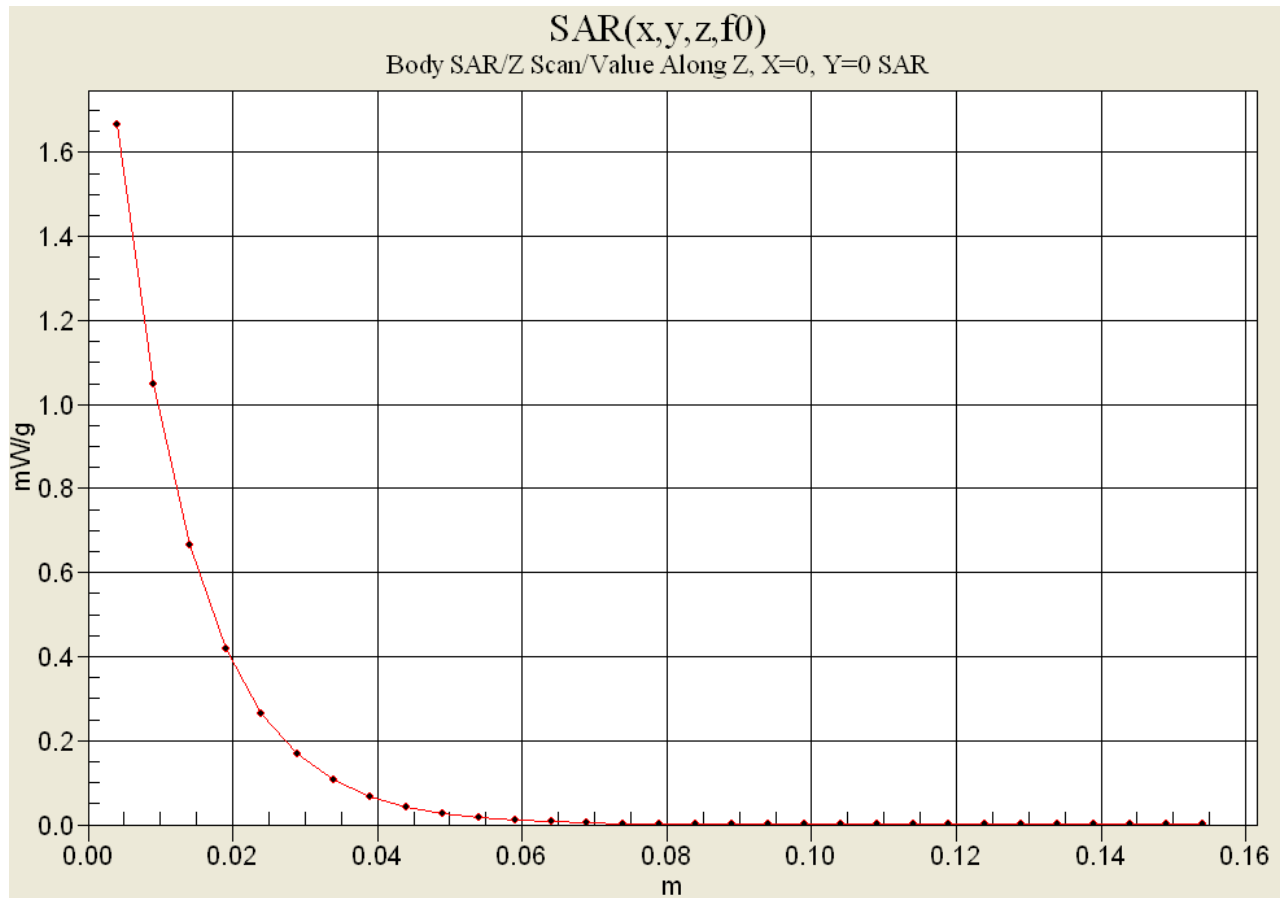
SAR(1 g) = 1.52 mW/g; SAR(10 g) = 0.910 mW/g

Reference Value = 32.5 V/m

Power Drift = 0.00168 dB



Z-Axis Scan



Body SAR - PCS Band - GPRS Mode - Right Side of DUT (Antenna Side)

Date Tested: 03/04/04

DUT: Itronix Model: IX100x; Type: Rugged Handheld PC with PCS GPRS, 802.11b, & Bluetooth; Serial: 510495001-U5103-0025

Ambient Temp: 24.1 °C; Fluid Temp: 21.8 °C; Barometric Pressure: 102.1 kPa; Humidity: 32%

7.4V, 3.0Ah Li-ion Battery Pack

Communication System: PCS GPRS

RF Output Power: 28.6 dBm (Peak Conducted)

Frequency: 1909.8 MHz; Channel: 810; Duty Cycle: 1:2

Medium: M1880 ($\sigma = 1.54$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1590; ConvF(5, 5, 5); Calibrated: 15/05/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Barski Planar; Type: Fiberglass; S/N: 03-01
- Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 94

Body SAR - PCS GPRS - Right Side of DUT (Antenna Side) - 0.5 cm Separation Distance - High Channel - 1909.8 MHz
Area Scan (6x22x1): Measurement grid: dx=15mm, dy=15mm

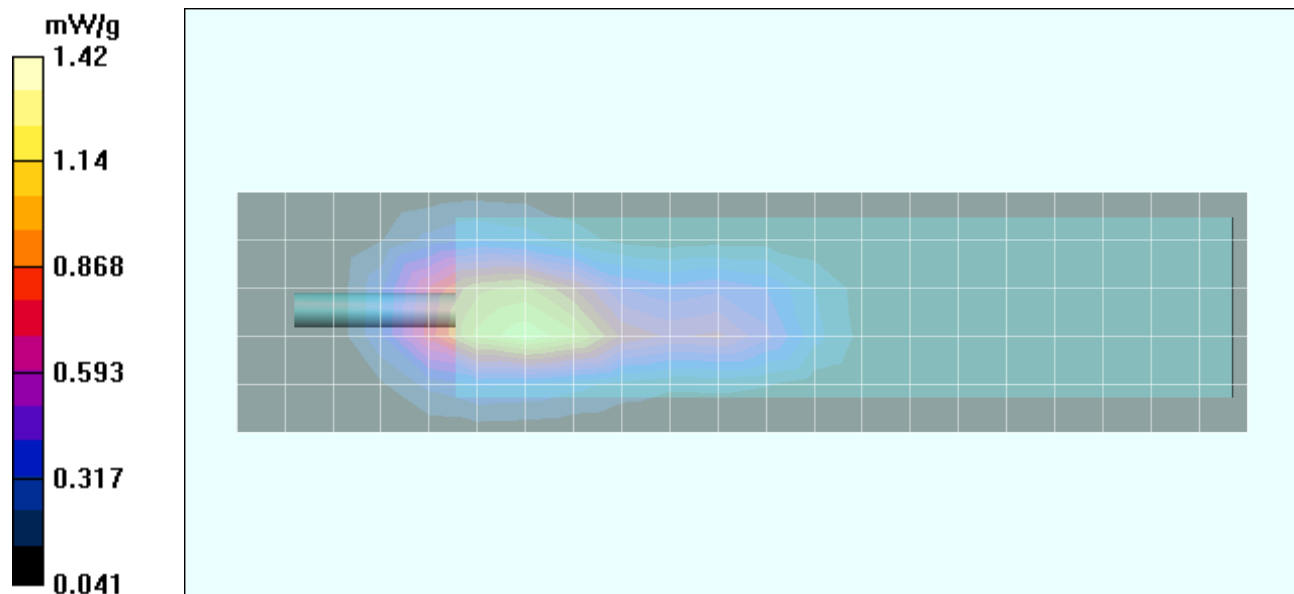
Body SAR - PCS GPRS - Right Side of DUT (Antenna Side) - 0.5 cm Separation Distance - High Channel - 1909.8 MHz
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 2.11 W/kg

SAR(1 g) = 1.30 mW/g; SAR(10 g) = 0.770 mW/g

Reference Value = 29.7 V/m

Power Drift = 0.000107 dB



Body-Worn SAR - PCS Band - GPRS Mode - Front Side of DUT - with Carry Case

Date Tested: 03/05/04

DUT: Itronix Model: IX100x; Type: Rugged Handheld PC with PCS GPRS, 802.11b, & Bluetooth; Serial: 510495001-U5103-0025

Body-Worn Accessories: Nylon Carry-Case (P/N: 54-0644-001), Ear-Microphone (Model: JABRA)

Ambient Temp: 23.4 °C; Fluid Temp: 21.7 °C; Barometric Pressure: 101.5 kPa; Humidity: 31%

7.4V, 3.0Ah Li-ion Battery Pack

Communication System: PCS GPRS

RF Output Power: 28.6 dBm (Peak Conducted)

Frequency: 1800.0 MHz; Channel 661; Duty Cycle: 1:2

Medium: M1880 ($\sigma = 1.59$ mho/m; $\epsilon_r = 52.2$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1590; ConvF(5, 5, 5); Calibrated: 15/05/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Barski Planar; Type: Fiberglass; S/N: 03-01
- Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 94

Body-Worn - PCS GPRS - Front Side of DUT (LCD/Keypad Side) facing front of Carry Case & Planar Phantom
0.0 cm Separation Distance - Mid Channel - 1880.0 MHz

Area Scan (10x22x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - PCS GPRS - Front Side of DUT (LCD/Keypad Side) facing front of Carry Case & Planar Phantom
0.0 cm Separation Distance - Mid Channel - 1880.0 MHz

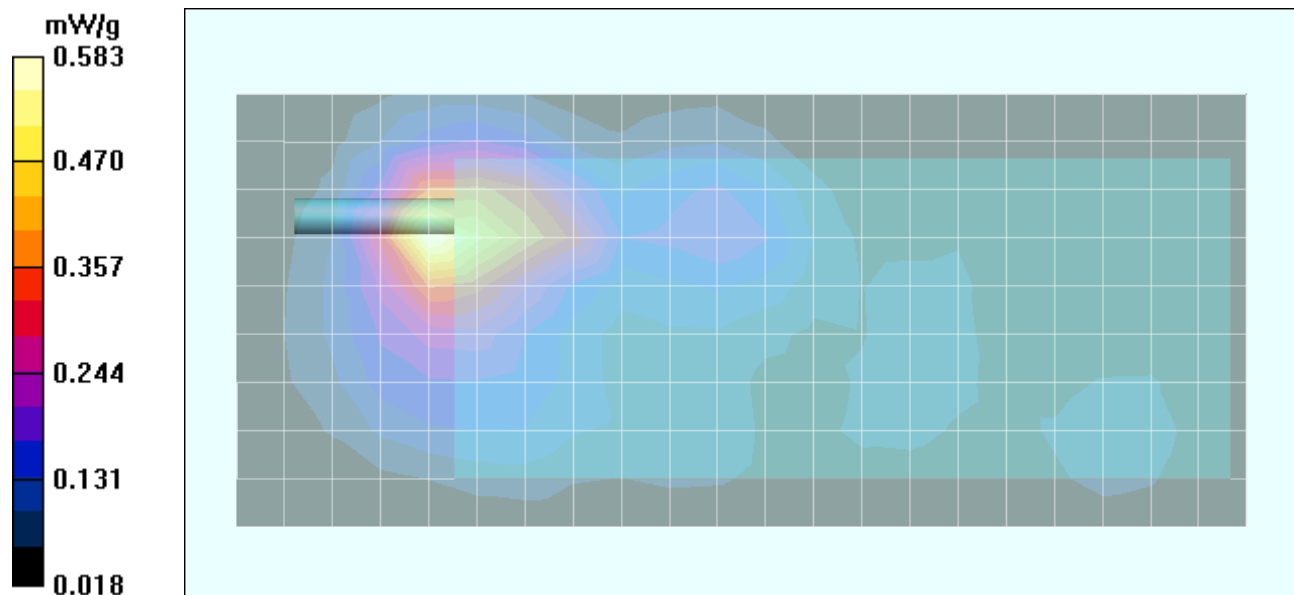
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 0.894 W/kg

SAR(1 g) = 0.530 mW/g; SAR(10 g) = 0.316 mW/g

Reference Value = 10.1 V/m

Power Drift = 0.00205 dB



Body-Worn SAR - PCS Band - GPRS Mode - Back Side of DUT - with Carry Case

Date Tested: 03/05/04

DUT: Itronix Model: IX100x; Type: Rugged Handheld PC with PCS GPRS, 802.11b, & Bluetooth; Serial: 510495001-U5103-0025

Body-Worn Accessories: Nylon Carry-Case (P/N: 54-0644-001), Ear-Microphone (Model: JABRA)

Ambient Temp: 23.4 °C; Fluid Temp: 21.7 °C; Barometric Pressure: 101.5 kPa; Humidity: 31%

7.4V, 3.0Ah Li-ion Battery Pack
Communication System: PCS GPRS
RF Output Power: 28.6 dBm (Peak Conducted)
Frequency: 1800.0 MHz; Channel 661; Duty Cycle: 1:2
Medium: M1880 ($\sigma = 1.59$ mho/m; $\epsilon_r = 52.2$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1590; ConvF(5, 5, 5); Calibrated: 15/05/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Barski Planar; Type: Fiberglass; S/N: 03-01
- Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 94

Body-Worn - PCS GPRS - Back Side of DUT (Battery Side) facing front of Carry Case & Planar Phantom 0.0 cm Separation Distance - Mid Channel - 1880.0 MHz

Area Scan (10x22x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - PCS GPRS - Back Side of DUT (Battery Side) facing front of Carry Case & Planar Phantom 0.0 cm Separation Distance - Mid Channel - 1880.0 MHz

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 0.627 W/kg

SAR(1 g) = 0.388 mW/g; SAR(10 g) = 0.233 mW/g

Reference Value = 17.1 V/m

Power Drift = -0.0647 dB

Body-Worn - PCS GPRS - Back Side of DUT (Battery Side) facing front of Carry Case & Planar Phantom 0.0 cm Separation Distance - Mid Channel - 1880.0 MHz

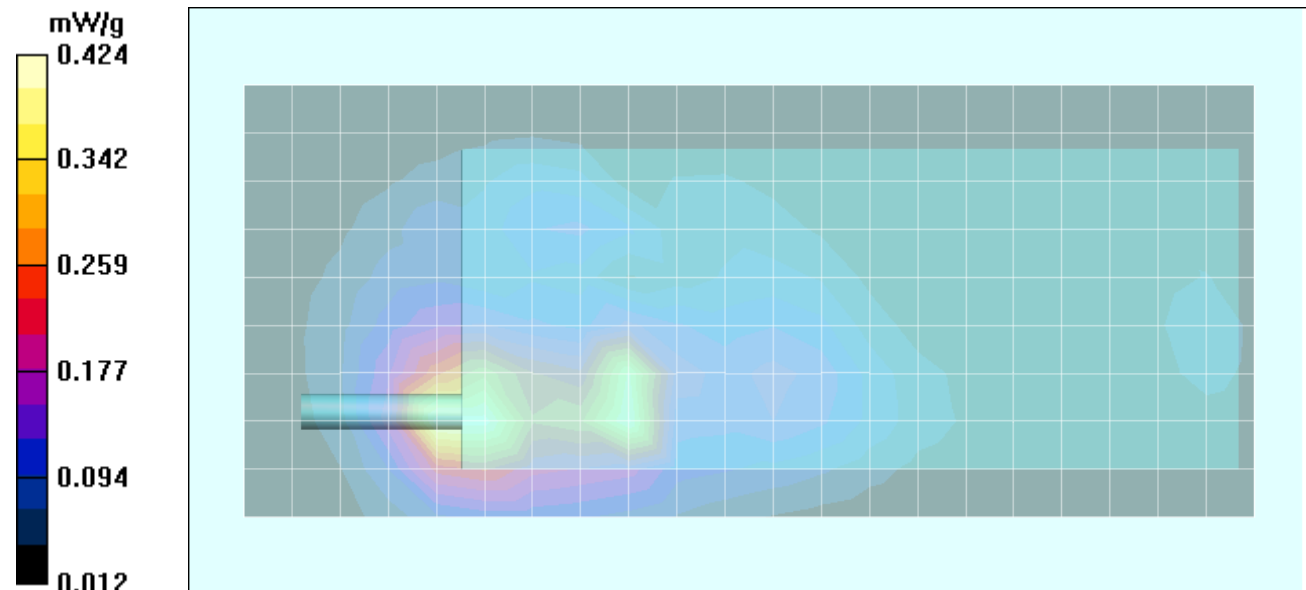
Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 0.591 W/kg

SAR(1 g) = 0.357 mW/g; SAR(10 g) = 0.201 mW/g

Reference Value = 17.1 V/m

Power Drift = -0.0647 dB



Body-Worn SAR - PCS Band - GPRS Mode - Right Side of DUT (Antenna Side) - with Carry Case

Date Tested: 03/05/04

DUT: Itronix Model: IX100x; Type: Rugged Handheld PC with PCS GPRS, 802.11b, & Bluetooth; Serial: 510495001-U5103-0025

Body-Worn Accessories: Nylon Carry-Case (P/N: 54-0644-001), Ear-Microphone (Model: JABRA)

Ambient Temp: 23.4 °C; Fluid Temp: 21.7 °C; Barometric Pressure: 101.5 kPa; Humidity: 31%

7.4V, 3.0Ah Li-ion Battery Pack

Communication System: PCS GPRS

RF Output Power: 28.6 dBm (Peak Conducted)

Frequency: 1800.0 MHz; Channel 661; Duty Cycle: 1:2

Medium: M1880 ($\sigma = 1.59$ mho/m; $\epsilon_r = 52.2$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1590; ConvF(5, 5, 5); Calibrated: 15/05/2003

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn353; Calibrated: 19/12/2003

- Phantom: Barski Planar; Type: Fiberglass; S/N: 03-01

- Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 94

Body-Worn - PCS GPRS - Right Side of DUT (Antenna Side) - front side of DUT facing front of Carry Case

0.0 cm Separation Distance - Mid Channel - 1880.0 MHz

Area Scan (6x22x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - PCS GPRS - Right Side of DUT (Antenna Side) - front side of DUT facing front of Carry Case

0.0 cm Separation Distance - Mid Channel - 1880.0 MHz

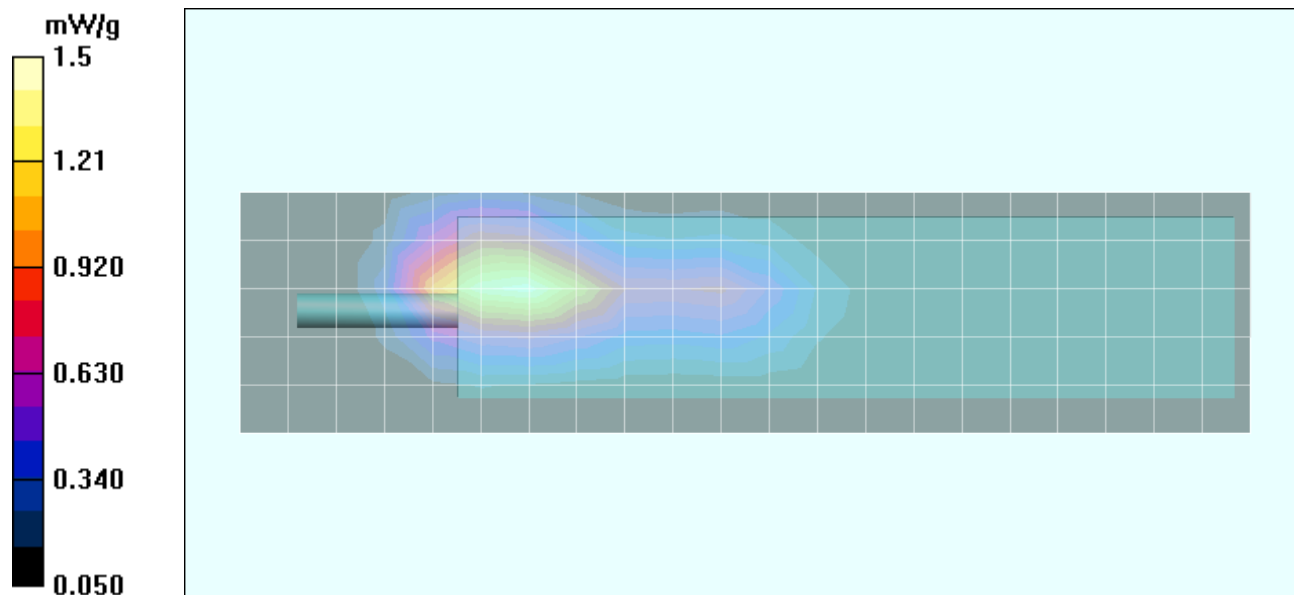
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 2.19 W/kg

SAR(1 g) = 1.37 mW/g; SAR(10 g) = 0.822 mW/g

Reference Value = 28.3 V/m

Power Drift = -0.02 dB



Body-Worn SAR - PCS Band - GPRS Mode - Right Side of DUT (Antenna Side) - with Carry Case

Date Tested: 03/05/04

DUT: Itronix Model: IX100x; Type: Rugged Handheld PC with PCS GPRS, 802.11b, & Bluetooth; Serial: 510495001-U5103-0025

Body-Worn Accessories: Nylon Carry-Case (P/N: 54-0644-001), Ear-Microphone (Model: JABRA)

Ambient Temp: 23.4 °C; Fluid Temp: 21.7 °C; Barometric Pressure: 101.5 kPa; Humidity: 31%

7.4V, 3.0Ah Li-ion Battery Pack

Communication System: PCS GPRS

RF Output Power: 28.7 dBm (Peak Conducted)

Frequency: 1850.2 MHz; Channel 512; Duty Cycle: 1:2

Medium: M1880 ($\sigma = 1.59$ mho/m; $\epsilon_r = 52.2$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1590; ConvF(5, 5, 5); Calibrated: 15/05/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Barski Planar; Type: Fiberglass; S/N: 03-01
- Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 94

Body-Worn - PCS GPRS - Right Side of DUT (Antenna Side) - front side of DUT facing front of Carry Case

0.0 cm Separation Distance - Low Channel - 1850.2 MHz

Area Scan (6x22x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - PCS GPRS - Right Side of DUT (Antenna Side) - front side of DUT facing front of Carry Case

0.0 cm Separation Distance - Low Channel - 1850.2 MHz

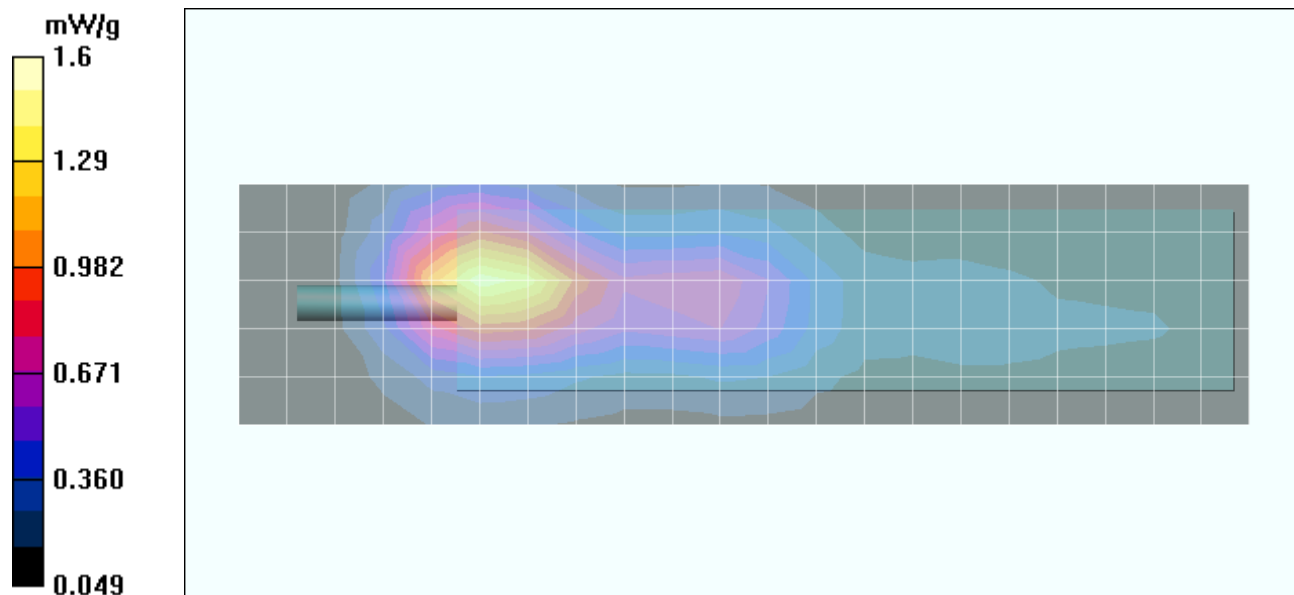
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 2.33 W/kg

SAR(1 g) = 1.48 mW/g; SAR(10 g) = 0.892 mW/g

Reference Value = 24.1 V/m

Power Drift = -0.08 dB



Body-Worn SAR - PCS Band - GPRS Mode - Right Side of DUT (Antenna Side) - with Carry Case

Date Tested: 03/05/04

DUT: Itronix Model: IX100x; Type: Rugged Handheld PC with PCS GPRS, 802.11b, & Bluetooth; Serial: 510495001-U5103-0025

Body-Worn Accessories: Nylon Carry-Case (P/N: 54-0644-001), Ear-Microphone (Model: JABRA)

Ambient Temp: 23.4 °C; Fluid Temp: 21.7 °C; Barometric Pressure: 101.5 kPa; Humidity: 31%

7.4V, 3.0Ah Li-ion Battery Pack

Communication System: PCS GPRS

RF Output Power: 28.6 dBm (Peak Conducted)

Frequency: 1909.8 MHz; Channel 810; Duty Cycle: 1:2

Medium: M1880 ($\sigma = 1.59$ mho/m; $\epsilon_r = 52.2$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1590; ConvF(5, 5, 5); Calibrated: 15/05/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Barski Planar; Type: Fiberglass; S/N: 03-01
- Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 94

Body-Worn - PCS GPRS - Right Side of DUT (Antenna Side) - front side of DUT facing front of Carry Case

0.0 cm Separation Distance - High Channel - 1909.8 MHz

Area Scan (6x22x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - PCS GPRS - Right Side of DUT (Antenna Side) - front side of DUT facing front of Carry Case

0.0 cm Separation Distance - High Channel - 1909.8 MHz

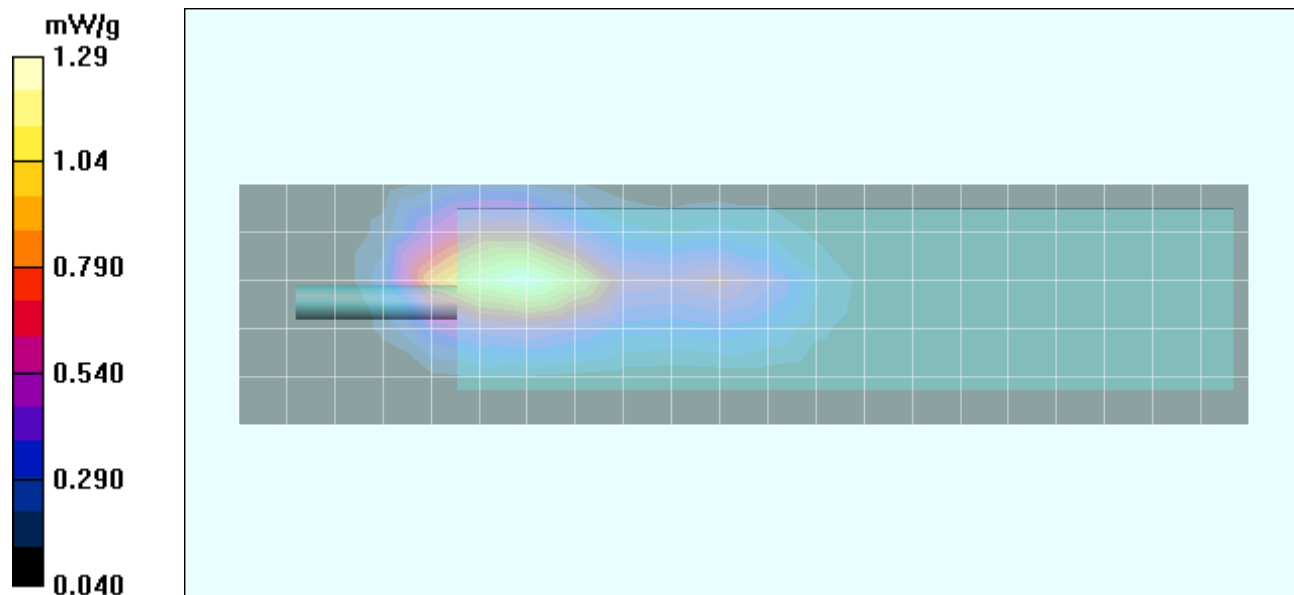
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 1.9 W/kg

SAR(1 g) = 1.18 mW/g; SAR(10 g) = 0.704 mW/g

Reference Value = 25.9 V/m

Power Drift = -0.01 dB



Body-Worn SAR - PCS Band - GPRS Mode - Right Side of DUT (Antenna Side) - with Carry Case

Date Tested: 03/05/04

DUT: Itronix Model: IX100x; Type: Rugged Handheld PC with PCS GPRS, 802.11b, & Bluetooth; Serial: 510495001-U5103-0025

Body-Worn Accessories: Nylon Carry-Case (P/N: 54-0644-001), Ear-Microphone (Model: JABRA)

Ambient Temp: 23.4 °C; Fluid Temp: 21.7 °C; Barometric Pressure: 101.5 kPa; Humidity: 31%

7.4V, 3.0Ah Li-ion Battery Pack

Communication System: PCS GPRS

RF Output Power: 28.6 dBm (Peak Conducted)

Frequency: 1800.0 MHz; Channel 661; Duty Cycle: 1:2

Medium: M1880 ($\sigma = 1.59$ mho/m; $\epsilon_r = 52.2$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1590; ConvF(5, 5, 5); Calibrated: 15/05/2003

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn353; Calibrated: 19/12/2003

- Phantom: Barski Planar; Type: Fiberglass; S/N: 03-01

- Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 94

Body-Worn - PCS GPRS - Right Side of DUT (Antenna Side) - back side of DUT facing front of Carry Case

0.0 cm Separation Distance - Mid Channel - 1880.0 MHz

Area Scan (6x22x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - PCS GPRS - Right Side of DUT (Antenna Side) - back side of DUT facing front of Carry Case

0.0 cm Separation Distance - Mid Channel - 1880.0 MHz

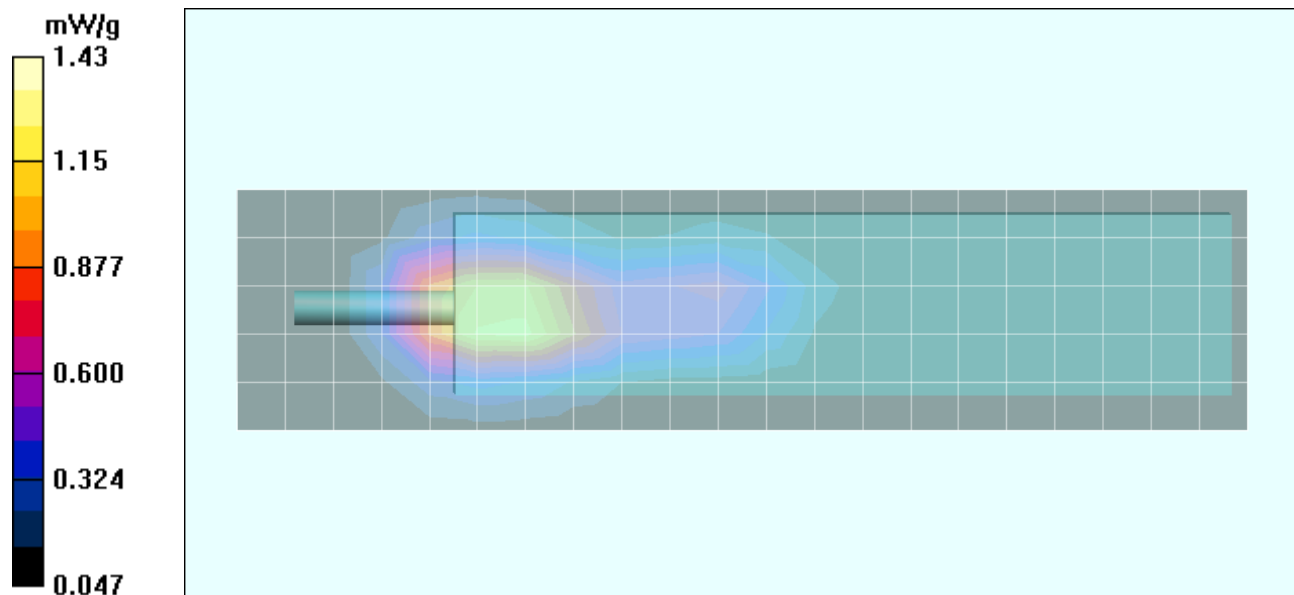
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 2.07 W/kg

SAR(1 g) = 1.30 mW/g; SAR(10 g) = 0.785 mW/g

Reference Value = 31.6 V/m

Power Drift = 0.02 dB



Body-Worn SAR - PCS Band - GPRS Mode - Right Side of DUT (Antenna Side) - with Carry Case

Date Tested: 03/05/04

DUT: Itronix Model: IX100x; Type: Rugged Handheld PC with PCS GPRS, 802.11b, & Bluetooth; Serial: 510495001-U5103-0025

Body-Worn Accessories: Nylon Carry-Case (P/N: 54-0644-001), Ear-Microphone (Model: JABRA)

Ambient Temp: 23.4 °C; Fluid Temp: 21.7 °C; Barometric Pressure: 101.5 kPa; Humidity: 31%

7.4V, 3.0Ah Li-ion Battery Pack

Communication System: PCS GPRS

RF Output Power: 28.7 dBm (Peak Conducted)

Frequency: 1850.2 MHz; Channel 512; Duty Cycle: 1:2

Medium: M1880 ($\sigma = 1.59$ mho/m; $\epsilon_r = 52.2$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1590; ConvF(5, 5, 5); Calibrated: 15/05/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Barski Planar; Type: Fiberglass; S/N: 03-01
- Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 94

Body-Worn - PCS GPRS - Right Side of DUT (Antenna Side) - back side of DUT facing front of Carry Case

0.0 cm Separation Distance - Low Channel - 1850.2 MHz

Area Scan (6x22x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - PCS GPRS - Right Side of DUT (Antenna Side) - back side of DUT facing front of Carry Case

0.0 cm Separation Distance - Low Channel - 1850.2 MHz

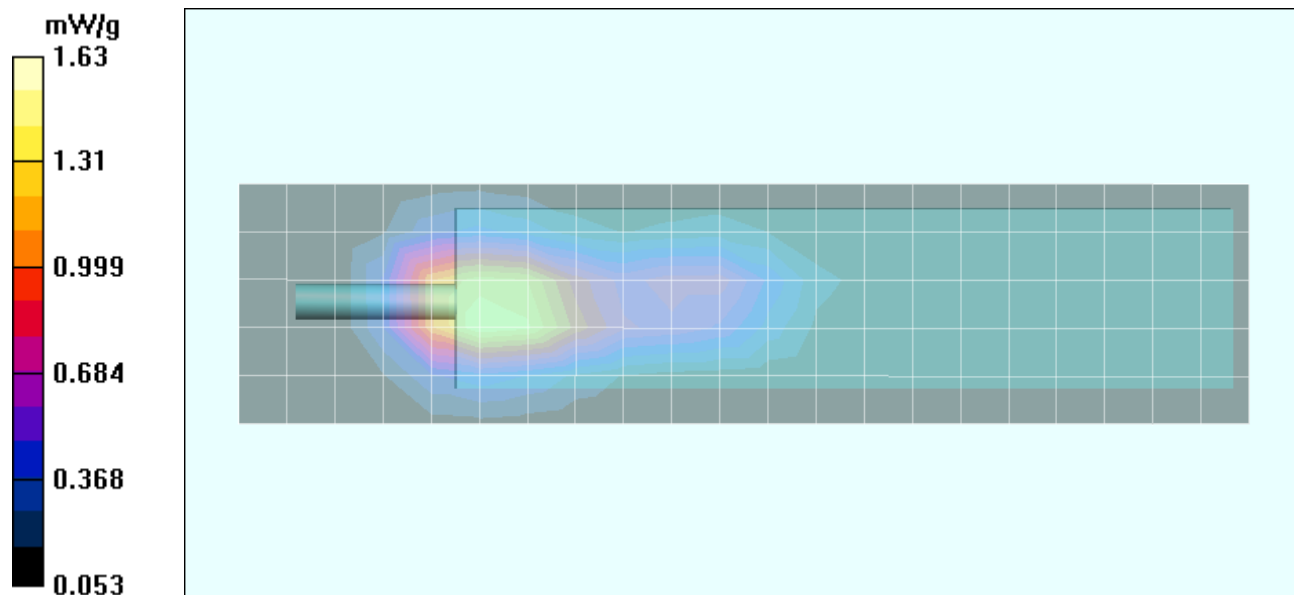
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 2.36 W/kg

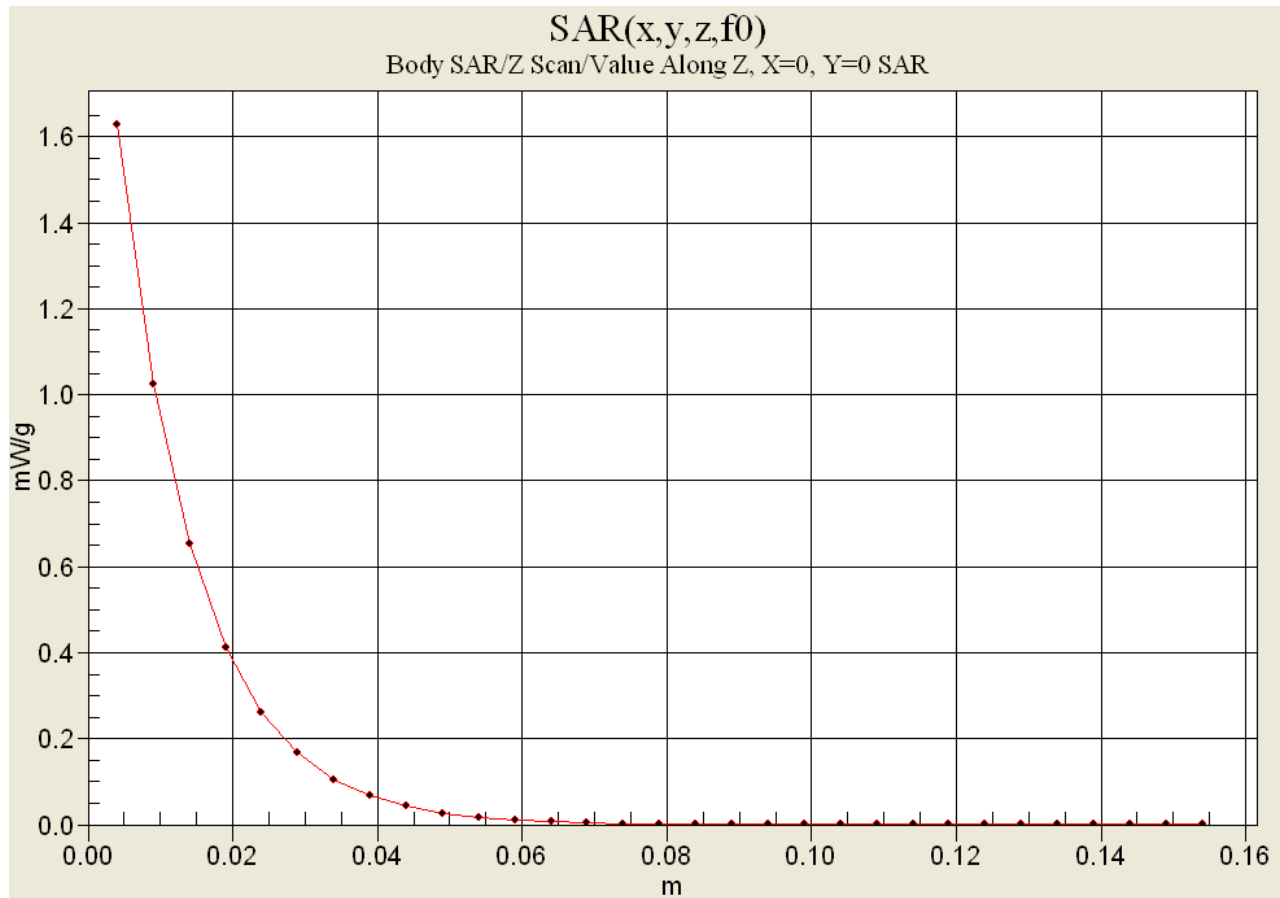
SAR(1 g) = 1.48 mW/g; SAR(10 g) = 0.899 mW/g

Reference Value = 34.1 V/m

Power Drift = 0.01 dB



Z-Axis Scan



Body-Worn SAR - PCS Band - GPRS Mode - Right Side of DUT (Antenna Side) - with Carry Case

Date Tested: 03/05/04

DUT: Itronix Model: IX100x; Type: Rugged Handheld PC with PCS GPRS, 802.11b, & Bluetooth; Serial: 510495001-U5103-0025

Body-Worn Accessories: Nylon Carry-Case (P/N: 54-0644-001), Ear-Microphone (Model: JABRA)

Ambient Temp: 23.4 °C; Fluid Temp: 21.7 °C; Barometric Pressure: 101.5 kPa; Humidity: 31%

7.4V, 3.0Ah Li-ion Battery Pack

Communication System: PCS GPRS

RF Output Power: 28.6 dBm (Peak Conducted)

Frequency: 1909.8 MHz; Channel 810; Duty Cycle: 1:2

Medium: M1880 ($\sigma = 1.59$ mho/m; $\epsilon_r = 52.2$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1590; ConvF(5, 5, 5); Calibrated: 15/05/2003

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn353; Calibrated: 19/12/2003

- Phantom: Barski Planar; Type: Fiberglass; S/N: 03-01

- Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 94

Body-Worn - PCS GPRS - Right Side of DUT (Antenna Side) - back side of DUT facing front of Carry Case

0.0 cm Separation Distance - High Channel - 1909.8 MHz

Area Scan (6x22x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - PCS GPRS - Right Side of DUT (Antenna Side) - back side of DUT facing front of Carry Case

0.0 cm Separation Distance - High Channel - 1909.8 MHz

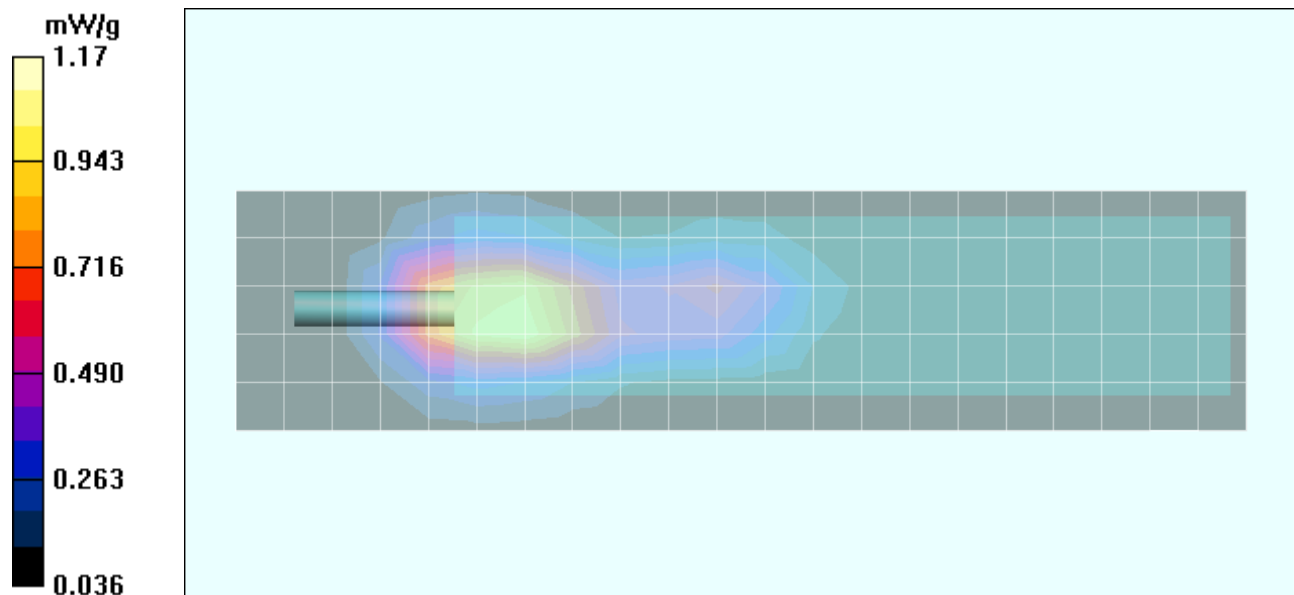
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 1.7 W/kg

SAR(1 g) = 1.07 mW/g; SAR(10 g) = 0.639 mW/g

Reference Value = 28.3 V/m

Power Drift = 0.00 dB



Body SAR - PCS Band - GPRS Mode - Right Side of DUT (Antenna Side)

Simultaneous Transmit with Co-located 802.11b Transmitter

Date Tested: 03/05/04

DUT: Itronix Model: IX100x; Type: Rugged Handheld PC with PCS GPRS, 802.11b, & Bluetooth; Serial: 510495001-U5103-0025

Ambient Temp: 23.4 °C; Fluid Temp: 21.7 °C; Barometric Pressure: 101.5 kPa; Humidity: 31%

7.4V, 3.0Ah Li-ion Battery Pack

Communication System: PCS GPRS

Communication System: DSSS (802.11b)

RF Output Power: 28.7 dBm (Peak Conducted) GPRS

RF Output Power: 14.0 dBm (Peak Conducted) 802.11b

Frequency: 1850.2 MHz; Channel 512; Duty Cycle: 1:2

Frequency: 2437 MHz; Duty Cycle: 1:1 (802.11b)

Medium: M1880 ($\sigma = 1.59$ mho/m; $\epsilon_r = 52.2$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1590; ConvF(5, 5, 5); Calibrated: 15/05/2003

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn353; Calibrated: 19/12/2003

- Phantom: Barski Planar; Type: Fiberglass; S/N: 03-01

- Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 94

Body SAR - PCS GPRS & 802.11b - Right Side of DUT (Antenna Side) - 0.5 cm Separation Distance

Low Channel - 1850.2 MHz/Area Scan (6x22x1): Measurement grid: dx=15mm, dy=15mm

Body SAR - PCS GPRS & 802.11b - Right Side of DUT (Antenna Side) - 0.5 cm Separation Distance

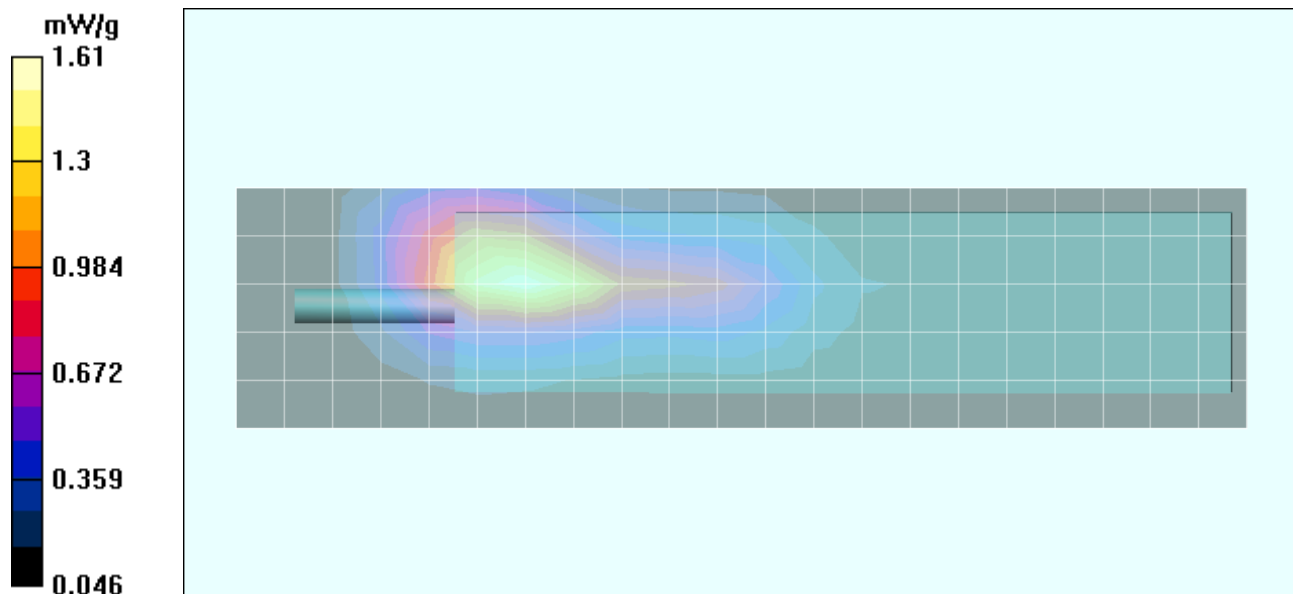
Low Channel - 1850.2 MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 2.37 W/kg

SAR(1 g) = 1.48 mW/g; SAR(10 g) = 0.875 mW/g

Reference Value = 28.4 V/m

Power Drift = -0.04 dB



Body SAR - PCS Band - GPRS Mode - Right Side of DUT (Antenna Side)

Simultaneous Transmit with Co-located 802.11b & Bluetooth Transmitters

Date Tested: 03/05/04

DUT: Itronix Model: IX100x; Type: Rugged Handheld PC with PCS GPRS, 802.11b, & Bluetooth; Serial: 510495001-U5103-0025

Ambient Temp: 23.4 °C; Fluid Temp: 21.7 °C; Barometric Pressure: 101.5 kPa; Humidity: 31%

7.4V, 3.0Ah Li-ion Battery Pack
 Communication System: PCS GPRS
 Communication System: DSSS (802.11b)
 Communication System: Modulated (Bluetooth)
 RF Output Power: 28.7 dBm (Peak Conducted) GPRS
 RF Output Power: 14.0 dBm (Peak Conducted) 802.11b
 RF Output Power: 3.5 dBm (Peak Conducted) Bluetooth
 Frequency: 1850.2 MHz; Channel 512; Duty Cycle: 1:2
 Frequency: 2437 MHz; Duty Cycle: 1:1 (802.11b)
 Frequency: 2441 MHz; Duty Cycle: 1:1 (Bluetooth)
 Medium: M1880 ($\sigma = 1.59 \text{ mho/m}$; $\epsilon_r = 52.2$; $\rho = 1000 \text{ kg/m}^3$)

- Probe: ET3DV6 - SN1590; ConvF(5, 5, 5); Calibrated: 15/05/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Barski Planar; Type: Fiberglass; S/N: 03-01
- Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 94

Body SAR - PCS GPRS, 802.11b, & Bluetooth - Right Side of DUT (Antenna Side) - 0.5 cm Separation Distance Low Channel - 1850.2 MHz/Area Scan (6x22x1): Measurement grid: dx=15mm, dy=15mm

Body SAR - PCS GPRS, 802.11b, & Bluetooth - Right Side of DUT (Antenna Side) - 0.5 cm Separation Distance Low Channel - 1850.2 MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 2.29 W/kg
SAR(1 g) = 1.44 mW/g; SAR(10 g) = 0.814 mW/g
 Reference Value = 27.1 V/m
 Power Drift = -0.01 dB

