

POTPIEX01 modular integration instruction in host device

The POTPIEX01 (WPT module) is manufactured by Intuitive Surgical, Inc. to be installed in host products manufactured by Intuitive Surgical, Inc.

The intended use of the POTPIEX01 module is to provide wireless power to an endoscope (client device) that is plugged into the module. The POTPIEX01 module will provide wireless power in frequency range 120 – 148.5 kHz to endoscope. The POTPIEX01 module has permanently attached coil antenna (53 mm x 53 mm) that is not accessible or replaceable by the end user.

Per FCC KDB 996369, host product manufacturers shall follow modular integration instructions of this document when they integrate POTPIEX01 in a host product.

The reason that POTPIEX01 has limited modular approval is because the module does not have its own shielding per FCC §15.212 (a) (1) (i) and it cannot be tested stand-alone.

1. List of applicable FCC rules that are applicable to the modular transmitters
47 CFR FCC §15.207 and §15.209.
2. Summary of specific operational use conditions
POTPIEX01 has a built-in, integral loop/coil antenna. Host product manufacturer is not allowed to make changes to the built-in antenna.
3. Limited module procedures
Full testing per FCC §15.207 and §15.209 and a Class II permissive change are required on the module grant of POTPIEX01 to register the host device as a specific host approved with the POTPIEX01 module. Full testing includes fundamental, spurious, out of band and band edge radiated emissions as well as conducted emissions on AC power port and an RF exposure assessment. The RF exposure shall be evaluated in portable condition in accordance with FCC KDB 680106 or latest guidance.
4. Trace antenna designs
Not applicable. POTPIEX1 has a built-in, integral loop/coil antenna. Host product manufacturer is not allowed to make changes to trace antenna designs.

5. RF exposure considerations

POTPIEX01 may be installed such that it can be operated as close as 0 cm to users or nearby persons. The use condition applies for portable use. If integration is such that the user would be 20 cm or farther, then mobile use is applied.

6. Antennas

POTPIEX01	<p>Inductance: 10 μH</p> <p>Number of turns: 12</p> <p>Ferrite shield: 53mm x 53mm x 1.5mm</p> <p>Dimensions in mm: 48mm x 48mm</p>

7. Label and compliance information

FCC

The host product must be labeled with the following:

Contains FCC ID: 2AAZF-POTPIEX01

The host product user manual must include the following statements:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.”

ISED

The host product must be labeled with the following:

Contains IC: 11508A-POTPIEX01

The host product user manual must include the following statements:

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (eirp) is not more than necessary for successful communication.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Conformément à la réglementation d'Industrie Canada, cet émetteur radio peut fonctionner uniquement à l'aide d'une antenne de type et de gain maximum (ou moindre) approuvés pour l'émetteur par Industrie Canada. Pour réduire le risque d'interférence aux autres utilisateurs, le type d'antenne et son gain doivent être choisis afin que la puissance isotrope rayonnée équivalente (PIRE) n'excède pas celle nécessaire à une communication réussie.

Cet appareil est conforme au(x) standard(s) des CNR d'Industrie Canada pour appareils radio exempt(s) de licence. Son fonctionnement est soumis aux deux conditions suivantes: (1) ce dispositif ne doit pas causer d'interférences nuisibles, et (2) cet appareil doit accepter toute interférence reçue, y compris les interférences qui peuvent provoquer un fonctionnement indésirable.

8. Information of test modes and additional testing requirements

Host product with POTPIEX01 installed shall have endoscope plugged into the module. A host product requiring FCC approval shall be tested to FCC Part 15 Subpart B to check for emissions that may occur due to the intermixing of emissions with digital circuitry or due to enclosure of the host product. Full testing per FCC §15.207 and §15.209 includes fundamental, spurious, out of band and band edge radiated emissions as well as conducted emissions on AC power port and an RF exposure assessment.

Any changes in the receiving WPT coil and its circuits in the endoscope plug (client device) will require a Class 2 Permissive Change. The receiving WPT coil is Wurth Elektronik P/N 760308102207 and the controller is Renesas Electronics P/N P9221-R.

9. Additional testing, part 15 Subpart B disclaimer

POTPIEX01 is only FCC authorized for specific rule parts listed on the grant, and the host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification. The final host product which requires



FCC approval still requires Part 15 Subpart B compliance testing with POTPIEX01 installed. Such additional testing should include any co-located radios.