



PiiX and zLink comply with the Wireless Emissions and Immunity Standard IEC 60601-1-2:2001. Following is the PiiX and zLink manufacturer's declarations as per IEC 60601-1-2:2001 standard.

PiiX - Guidance and Manufacturer's declaration, according to EN 60601-1-2:2001 +A1:2006


PiiX Table 201 – Guidance and Manufacturer's declaration - Electromagnetic Emissions – for all equipment and systems

Guidance and Manufacturer declaration – Electromagnetic Emissions		
The PiiX is intended for use in electromagnetic environment specified below. The customer or the user of the PiiX should assure that it is used in such an environment		
Emissions Test	Compliance	Electromagnetic environment – guidance
RF Emissions EN 55011	Group 1	The PiiX uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF Emissions EN 55011	Class B	The PiiX is suitable for use in all establishments, including domestic establishments, and those directly connected to public low-voltage power supply network that supplies buildings used for domestic purposes.

PiiX Table 202 – Guidance and Manufacturer’s declaration – Electromagnetic immunity – for all equipment and systems

Guidance and Manufacturer’s declaration - Electromagnetic immunity			
The PiiX is intended for use in electromagnetic environment specified below. The customer or the user of the PiiX should assure that it is used in such an environment			
Immunity Test	EN60601 test level	Compliance level	Electromagnetic environment – advice
Electrostatic discharge (ESD) EN 61000-4-2	$\pm (2,4,6)$ kV contact $\pm (2,4,8)$ kV air	$\pm (2,4,6)$ kV contact $\pm (2,4,8)$ kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Power Frequency (50/60) Hz Magnetic field EN 61000-4-8	3 A/m	3A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Note: UT is the A.C mains voltage prior to application of the test level			

PiiX Table 204 - Guidance and manufacturer's declaration - Electromagnetic immunity - for EQUIPMENT and SYSTEMS that are not LIFE-SUPPORTING

Guidance and manufacturer's declaration—electromagnetic immunity			
The PiiX is intended for use in the electromagnetic environment specified below. The customer or the user of the PiiX should assure that it is used in such an environment.			
Immunity Test	EN60601 test level	Compliance level	Electromagnetic environment – advice
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m 80 MHz to 2.5 GHz	<p>Portable and mobile RF communications equipment should be used no closer to any part of the PiiX, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.</p> <p>Recommended separation distance</p> $d = 1.2 \sqrt{P}$ $d = 1.2 \sqrt{P} \quad 80 \text{ MHz to } 800 \text{ MHz}$ $d = 2.3 \sqrt{P} \quad 800 \text{ MHz to } 2.5 \text{ GHz}$ <p>where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m).</p> <p>Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey^a, should be less than the compliance level in each frequency range.</p> <p>Interference may occur in the vicinity of equipment marked with the following symbol:</p> 
NOTE 1—At 80 MHz and 800 MHz, the higher frequency range applies.			
NOTE 2—These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.			
^a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast, and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the PiiX is used exceeds the applicable RF compliance level above, the PiiX should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the PiiX.			

zLink - Guidance and Manufacturer's declaration, according to EN 60601-1-2:2001 +A1:2006


zLink Table 201 – Guidance and Manufacturer's declaration - Electromagnetic Emissions – for all equipment and systems

Guidance and Manufacturer declaration – Electromagnetic Emissions		
zLink is intended for use in electromagnetic environment specified below. The customer or the user of the zLink should assure that it is used in such an environment		
Emissions Test	Compliance	Electromagnetic environment – guidance
RF Emissions EN 55011	Group 1	zLink uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment. zLink is suitable for use in all establishments, including domestic establishments, and those directly connected to public low-voltage power supply network that supplies buildings used for domestic purposes.
RF Emissions EN 55011	Class B	
Harmonic emission EN 61000-3-2	Class A	
Voltage fluctuations / Flicker emissions EN 61000-3-3	Complies	

zLink Table 202 – Guidance and Manufacturer’s declaration – Electromagnetic immunity – for all equipment and systems

Guidance and Manufacturer’s declaration - Electromagnetic immunity			
zLink is intended for use in electromagnetic environment specified below. The customer or the user of zLink should assure that it is used in such an environment			
Immunity Test	EN60601 test level	Compliance level	Electromagnetic environment – advice
Electrostatic discharge (ESD) EN 61000-4-2	± (2,4,6) kV contact ± (2,4,8) kV air	± (2,4,6) kV contact ± (2,4,8) kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst EN 61000-4-4	±2 kV for power supply lines ±1 kV for input/output files	±2 kV for power supply lines ±1 kV for input/output files	Mains power quality should be that of a typical commercial or hospital environment.
Surge EN 61000-4-5	±1 kV differential mode ±2 kV common mode	±1 kV differential mode ±2 kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions, and voltage variations on power supply input lines IEC 61000-4-11	<5 % UT (>95 % dip in UT) for 0.5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles <5 % UT (>95 % dip in UT for 5 sec	<5 % UT (>95 % dip in UT) for 0.5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles <5 % UT (>95 % dip in UT for 5 sec	Mains power quality should be that of a typical commercial or hospital environment. If the user of the gateway requires continued operation during power mains interruptions, it is recommended that zLink be powered from an uninterruptible power supply or a battery.
Power Frequency (50/60) Hz Magnetic field EN 61000-4-8	3 A/m	3A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Note: UT is the A.C mains voltage prior to application of the test level			

zLink Table 204 - Guidance and manufacturer's declaration - Electromagnetic immunity - for EQUIPMENT and SYSTEMS that are not LIFE-SUPPORTING

Guidance and manufacturer's declaration—electromagnetic immunity			
zLink is intended for use in the electromagnetic environment specified below. The customer or the user of the zLink should assure that it is used in such an environment.			
Immunity Test	EN60601 test level	Compliance level	Electromagnetic environment – advice
Conducted RF IEC 61000-4-6	3Vrms 150 KHz to 80 MHz	3Vrms 150 KHz to 80 MHz	<p>Portable and mobile RF communications equipment should be used no closer to any part of the gateway, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.</p> <p>Recommended separation distance</p> $d = 1.2 \sqrt{P}$ $d = 1.2 \sqrt{P} \quad 80 \text{ MHz to } 800 \text{ MHz}$ $d = 2.3 \sqrt{P} \quad 800 \text{ MHz to } 2.5 \text{ GHz}$ <p>where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m).</p>
	3 V/m 80 MHz to 2.5 GHz	3 V/m 80 MHz to 2.5 GHz	<p>Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey^a, should be less than the compliance level in each frequency range^b.</p>
Radiated RF IEC 61000-4-3	10 V/m 26MHz – 1 GHz	10 V/m 26MHz – 1 GHz	<p>Interference may occur in the vicinity of equipment marked with the following symbol:</p> 
<p>NOTE 1—At 80 MHz and 800 MHz, the higher frequency range applies.</p> <p>NOTE 2—These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.</p>			

^a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast, and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which zLink is used exceeds the applicable RF compliance level above, the gateway should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating zLink.

^b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than [V1] V/m.