



Declaration of Conformity

Quartzdyne Inc.

Signatory Lon Perry, President

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A) Signatory declares that the frequency-output product families and *Series I* comply with directives 89/336/EEC and 92/31/EEC for use in industrial areas as demonstrated by conformance to the following specifications:

Standard	Description	Conditions
EN50082-2(1995)	General Immunity (Industrial)	
EN 61000-4-2	ESD @ 8kV Air, 4kV Contact	Criteria (B)
EN 61000-4-3	Radiated Immunity @ 10V/m, 80-1000 MHz 1kHz 80% AM modulation	Criteria (A)
EN 61000-4-4	EFT Immunity @ 2kV Mains, 1kV Signal/Data -	Criteria (B)
EN 61000-4-6	Coupled Immunity @ 10 V _{RMS} , 0.15-80 MHz, 1kHz 80% AM	Criteria (A)
EN50081-2 (1993)	Generic Emissions (Industrial)	
EN55011	Radiated Emissions	Compliant Class A
EN55011	Conducted Emissions	Compliant Class A

Criteria (A) - No degradation in performance

Criteria (B) – System self-recovers after test is complete. Some degradation of performance may be expected.

EMC Qualification Test System Configuration

Tests were conducted on a typical system consisting of a Transducer, Series I Transducer Interface and a power supply adapter. A fully shielded cable was used to connect the Transducer to the Series I. One Transducer/Interface system was connected to a computer via shielded RS-232 cable; additional Transducer/Interface systems were interconnected via unshielded RS-422 cables.

B) Signatory declares that the digital-output product families and *Q-LINK* comply with directives 89/336/EEC and 92/031/EEC for use in industrial areas as demonstrated by conformance to the following specifications:

Standard	Description	Conditions
IEC 61326-1(2005)		
IEC 61000-4-2	ESD @ 8kV Air, 6kV Contact	Criteria (B)
IEC 61000-4-3	Radiated Immunity @ 3V/m, 80MHz-2.0 GHz, 1V/m 2.0-2.7 GHz 80% AM	Criteria (A)
IEC 61000-4-4	EFT Immunity @ 2kV Mains, 1kV Signal/Data	Criteria (B)
IEC 61000-4-5	Surge @ Mains 1 kV L-L, 2 kV L-G, @ Signal Ports 1kV L-G, @ DC I/O Ports 0.5kV L-L 0.5kV L-G	Criteria (B)
IEC 61000-4-6	Conducted Immunity @ 3V _{RMS} , 0.15-80 MHz, 1kHz 80% AM	Criteria (A)
IEC 61000-4-11	Voltage Dips & Variations 0% for 1 cycle	Criteria (B)
CISPR 11 (2006)	Generic Emissions (Industrial)	
EN55011	Radiated Emissions	Compliant Class A Group 1
EN55011	Conducted Emissions	Compliant Class A Group 1

Criteria (A) - No degradation in performance

Criteria (B) – System self-recovers after test is complete. Some degradation of performance may be expected.

EMC Qualification Test System Configuration

Tests were conducted on a typical system consisting of a Transducer and a Q-LINK Transducer Interface with a Roving Networks RN-PS-INT power supply adapter. A fully shielded cable was used to connect the Transducer to the Q-LINK. The Q-LINK was connected to the PC via a fully shielded RS232 cable. All units were plumbed to a grounded (earthed) manifold.

Test Facility

Tests were conducted at DNB Engineering, Inc. Chalk Creek Test Facility, Coalville, Utah from November 1995 thru October 2009. DNB Engineering has been evaluated and approved to do these tests by NEMKO, Norway's Competent Body. Test results are on file at Quartzdyne, Inc.

WARNING!

Fully-shielded (360° termination) transducer cable and RS-232 cable are required. In your system configuration, failure to provide appropriate cabling is likely to result in a violation of the emissions and immunity standards. Our experience suggests that the appropriate cable includes a foil shield (for full shield coverage) plus a braided shield (to enable the 360° termination).