1 GENERAL INFORMATION

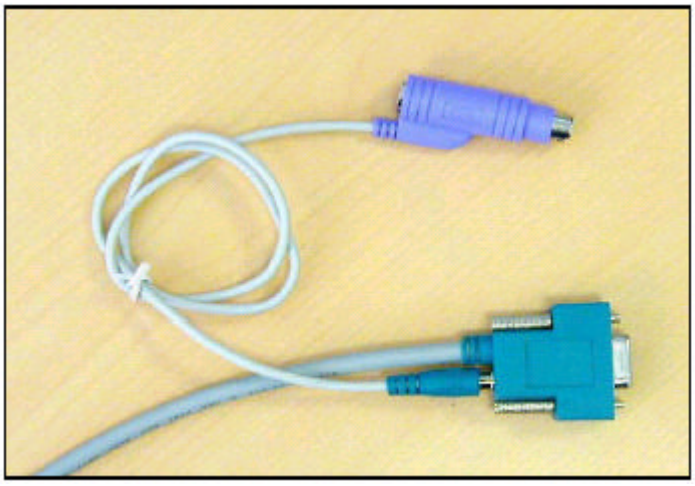
1.1 Product description of Textile Rental Programming Station

The Textile Rental Programming Station (TR-PS1) is a low-profile smart tags reader unit that includes the electronics required to read smart tags through its built-in antenna (See Figure 1).
Specifically designed for use in Textile Rental applications the TR-PS1 can work with most smart tags and will be compliant with the future ISO18000 standard.

- Figure 1 -

The TR-PS1 Programming Station is factory-calibrated to offer an optimum performance on the surface of the desk or table far from metal pieces.

The TR-PS1 has a built-in serial interface in compliance with RS-232C specifications. The RS-232 cable supplied with the TR-PS1 is used to communicate with a personal computer. The TR-PS1 is supplied power through a jumper to be plugged to the mouse or keyboard connector of the personal computer connected to the TR-PS1 RS-232 connector (See Figure 2).



- Figure 2 -

The primary use of the Textile Rental Programming Station (TR-PS1) is to read tags of garment to access to the laundry database.

The TR-PS1 uses the coupler's RF output to radiate the magnetic field and power up the tag. The antenna receives modulation from the tag acting as a field disturbing device. This signal is then delivered to the coupler. The TR-PS1 can communicate to the Personal Computer via the RS232 serial port.

Once the TR-PS1 Programming Station is connected to the host PC and the programming interface software is installed, the reading is easy and straightforward.
Place the item with the tag on the TR-PS1, making sure that the tag attached to the item is as close as possible to the active face of the antenna surface.

Once read the tag serial number is sent to the host PC.

For more information, see product's data sheet at section 1.6. and user's manual.

1.2 Related Submittal(s) / Grant(s)

All host equipment used in the test configuration are FCC granted, when relevant.

1.3 Tested System Details

The FCC IDs for all equipment, plus description of all cables used in the tested system are :

Trade Mark – Model Number (Serial number)	FCC ID	Description	Cable description
Textile Rental Programming Station (*) (sn: test series)	**QHKTRPRGMSTATN**	**Contactless smart label reader**	**RS232 shielded cable with 4 ferrite Power cable shielded**
ARIO10SL (sn: none)	None	Smart label	
HP Vectra VLi8 pn:D7963A (sn: FR94020451)	Doc of Conf	Personal computer	All data cables are shielded Power cord unshielded
HP P1100 pn:D2846 (sn: JP74001000)	Doc of Conf	Color monitor	Video cable with ferrite Power cord unshielded
HEWLETT PACKARD pn: C4734-60111 (sn: M971168931)	GYUR38SK	Keyboard	Shielded cable
HEWLETT PACKARD pn: C4736-60101 (sn: LZA93024031)	JNZ201213	Mouse	Shielded cable
HP Deskjet 895CXI pn: C6410A (sn: MY9761915S)	Doc of Conf	Parallel printer	Parallel cable shielded Power cord unshielded
Telex (sn: 700 373.000A)	none	Microphone	

(*) : Equipment Under Test

1.4 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4-1992+2000, FCC Part 15 Subpart C.
Radiated testing was performed at an antenna to EUT distance of 3 meters from 30MHz to 1GHz, and 10 meters from 9kHz to 30MHz. During testing, all equipment's and cables were moved relative to each other in order to identify the worst case set-up.

1.5 Test facility

Tests have been performed on May 20th & 21st , 2003.

The test facility used to collect all the test data is the SMEE *Actions Mesures* facility, located ZI des Blanchisseries, 38500 VOIRON, France.
This test facility has been fully described in a report and accepted by FCC as compliant with the radiated and AC line conducted test site criteria in ANSI C63.4-2000 in a letter dated July 19, 2002 (registration number 94821).
This test facility has also been accredited by COFRAC (French accreditation authority for European union test lab accreditation organization) according to NF EN ISO/IEC 17025, accreditation number 1-0844 as compliant with test site criteria and competence in 47 CFR Part 15/ANSI C63.4 and EN55022/CISPR22 norms for 89/336/EEC European EMC Directive application. All pertinent data for this test facility remains unchanged.

1.6 Data sheet of TR-PS1

1.6.1 Mechanical Characteristics

Description	Value
Housing	Plastic ABS UL 94-V0
Weight	1 kg (2.2 lbs.)
Dimensions	255 x 216 x 20 mm (10 x 8½ x ¾ in.)
Color	Pantone P536 blue
Protection	Class IP 21
Operating Temperature	0°C to 55°C (32 °F to 131 °F)
Storage Temperature	-25°C to +60°C (-130 °F to 140 °F)

1.6.2 Electrical Characteristics

Description	Value
RF Power	0.25 W
Operating Frequency	13.56 MHz
Power consumption	165 mA under 5V
Communication specification	RS-232
Communication speed	9600 bit/s