1   GENERAL INFORMATION

1.1   Product description

The Library Programming Station is a thin integrated reader which includes the electronics to read and write the smart labels (flexible tag set input books) and the antenna. It is a serial interface reader for smart label
The Library Programming Station can work with any existing TAGSYS smart labels and is upgradable to work with smart labels complying with the future ISO18000 standard.

The Library Programming Station has been specifically designed for use in the library application by library personnel in charge of tagging a collection of items with TAGSYS smart labels (flexible tag which consists of a chip connected to an antenna)..

This product includes an antenna with ferrite which gives it a good immunity to its environment (proximity to other readers or to different type of desk materials including metal).

The Library programming station has a built-in serial interface conforming to RS-232C, thus making it possible to communicate with personal computers. The supplied RS232 cable of the Library programming station is equipped with a jumper to be plugged to the keyboard connector of the personal computer to which the Library programming station is connected

The Programming Station uses the coupler's RF output to radiate the magnetic field and power up the smart label, The signal is modulated by the coupler to communicate commands to the smart label. The antenna also receives modulation from the smart label acting as a field disturbing device. This signal is then delivered to the coupler. The Programming Station can communicate to the Personal Computer via the RS232 serial port. The antenna are tuned in the factory or by a TAGSYS approved reseller at 13.56 MHz .

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

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
TAGSYS Library Programming Station* **(sn: none)**	**QHKPRGMSTATN**	**Contactless smart label read/write**	**RS232 shielded cable Power cable unshielded**
Folio 20 D5 (sn: 0600111001E30010110)	None	Smart label	
Folio 20 D5 (sn: 000000000000CAFEFDA)	None	Smart label	
Folio 20 D5 (sn: 055AA55AAFDA666242)	None	Smart label	
DELL Latitude CPi Model PPL (sn: 0009321C-12800-95N-2319) with adaptater PA.2 (sn: 12851-86C-2045)	Doc of Conf	Laptop	All data cables are shielded Power cable unshielded
HEWLETT PACKARD pn:D2846 (sn JP74001000)	Doc of Conf	21" color monitor	Shielded video cable with ferrite at each end. Power cable unshielded.
HEWLETT PACKARD pn:C4734-60111 (sn: M971168931)	GYUR38SK	Keyboard	Shielded cable
HEWLETT PACKARD pn:C6410A Deskjet 895Cxi (sn: MY9761915T)	Doc of Conf	Parallel printer	Shielded cable #C2950A

*Equipment Under Test

1.4 Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4-1992, FCC Part 15 Subpart C.
Radiated testing was performed at an antenna to EUT distance of 10 meters. 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 November 14th , 2002.

The test facility used to collect the radiated and conducted 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 C63.4-1992 in a letter dated August 04, 1999 (registration number 94821).

This test facility has also been accredited by COFRAC (French accreditation authority for European union test lab accreditation organization), accreditation number 1-0844 as compliant with test site criteria and competence in 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 Library Programming Station

Specification Summary

Housing	Plastic ABS UL 94-V0
Dimensions	288 x 263 x 17 mm
Weight	2 kg
Color	Pantone P536 blue
Protection class	IP 21

Table 2: Mechanical Data

Operating Temperature	0°C to 55°C
Storage Temperature	-25°C to +60°C

Table 3:Temperature range

RF Power	0,25 W
Operating Frequency	13,56 MHz
Power consumption	165 mA under 5V
Communication specification	RS232
Communication speed	Up to 38 400 bit/s

Table 4: Electrical Data

Typical Performances (*)	Reading: 18 cm Writing : 14 cm

Table 5: Performance chart