Excellence in Compliance Testing

Certification Exhibit

FCC ID: IQ5-VOY1-2

FCC Rule Part: CFR 47 Part 90.259

ACS Report Number: 09-0301-LD

Applicant: Data Flow Systems Inc.
Model: Voyager 1 Radio

RF Exposure

General Information:

Applicant:	Data Flow Systems Inc.
ACS Project:	09-0301
Device Category:	Fixed
Environment:	General Population/Uncontrolled Exposure

Technical Information:

Maximum Antenna Gain:	10dBi
Maximum RF Conducted Power:	32.35dBm, 1.72W
Maximum System EIRP:	42.35dBm, 17.2W

MPE Calculation

The Power Density (mW/cm^2) is calculated as follows:

$$S = \frac{PG}{4\pi R^2}$$

Where:
S = power density (in appropriate units, e.g. mW/cm2)
P = power input to the antenna (in appropriate units, e.g., mW)
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure*							
Transmit Frequency (MHz)	**Radio Power (dBm)**	**Power Density Limit (mW/Cm2)**	**Radio Power (mW)**	**Antenna Gain (dBi)**	**Antenna Gain (mW eq.)**	**Distance (cm)**	**Power Density (mW/cm^2)**
217.0125	32.35	0.20	1717.91	10	10.000	90	0.169

Installation Guidelines

The installation manual should contain text similar to the following advising how to install the equipment to maintain compliance with the FCC RF exposure requirements:

RF Exposure

In accordance with FCC requirements of human exposure to radio frequency fields, the radiating element shall be installed such that a minimum separation distance of 90 centimeters will be maintained.