



ISO 9001 Certified

November 23, 1999

**Federal Communications Commission
7435 Oakland Mills Road
Columbia, MD 21046
USA**

Subject: Professional installation for antenna.

**Applicant: TEKLOGIX INC.
Product Model: TRX7431
FCC ID: GM3WLPC24H**

Dear Sir/Madam

We, TEKLOGIX INC., wish to apply for the exemption of using the special coupling or permanently attached radiating antenna and RF Safety Requirements for the following reasons:
Our spread spectrum radio system constitutes a very flexible system that provides wireless real time transaction processing typically required for order processing in a warehouse environment. The models consist of an access point (9150), a hand held portable terminal (7035), and mobile units (8255 and 8260).

The 9150 access point is used to provide the base functions of the radio link. These units are always professionally installed. The "field service" personnel goes to the customers' site and performs a "site survey". This site survey uses our portable terminals configured with specialized software with the radios that are to be installed. The results of the site survey are then used to determine the type and quantities of equipment, interface requirements and where to locate the base antenna(s) to adequately cover the customer's site.

The second step is for the field service personnel to install the equipment by making the hardwired connections to mainframe and power source, making the hardwired connections between the system network controller and the 9150 and to connect the base antenna(s) to the 9150 in the location(s) indicated by the site survey. Whether or not the site survey was performed, the system is then tested for coverage by taking the handheld or mobile units to the edges of the sites to check for fringe coverage. Also at this time the system parameters are set and optimized for the customer's unique configuration. Once again, since this unit is always installed by professionally trained Teklogix personnel, no instructions are provided to the customer.

From the above you can see that there is a lot of effort expended by our trained field service personnel that would be impossible for a customer to do for themselves. A major portion of the installation process is the fine tuning of the system, that would be impossible for the customer to do themselves.

We pride ourselves in not just providing a system we provide an RF solution. What we mean by this is that we go to the customer site and provide a seamless transition from their present mainframe or data network system to one that uses the same original equipment and software. Our RF system appears as additional terminal emulating the terminals presently in their system.

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The 9150 antenna system would hardly ever have the luxury of using unique connector due to the logistics of locating the antenna high up in the rafters of the warehouse and carefully located to provide the maximum coverage. Typically then we have to provide a coaxial cable of standard length (25' OR 50' of LMR 400 cable) routed from the 9150 to the base antenna.

Therefore We, TEKLOGIX INC., wish to confirm that for RF Safety Requirements antenna systems including Cushcraft antenna are professionally installed for the following reasons:

The external antenna is required to be installed away from the users (on the roof of the building , on the antenna tower located outside of the building, on the wall at height of at least 15 feet high and 10 feet away from the users, or in case of mobile at least 40 Cms away from the operator) at all time. The installation of our system is always required to be performed by us or our professional sub-contractor following the Installation Procedure for this equipment.

Due to the nature of our system (providing a large area of coverage) there would be no advantage of the customer using a higher gain antenna because he would loose the omni directionality required for our system (we are not a point to point but a point to multipoint environment where the area of coverage not distance is important).

Since our system must always be professionally installed by our trained field service personnel, we feel that the 9150 portion of our system be deemed "must be professional installed". Therefore the unique antenna connector clause of the part 15 requirement would not be applicable.

Please accept our gratitude in advance for your prompt handling of this matter.

Sincerely,

Sada Dharwarkar, P.Eng.
Supervisor, Approvals
TEKLOGIX INC.

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