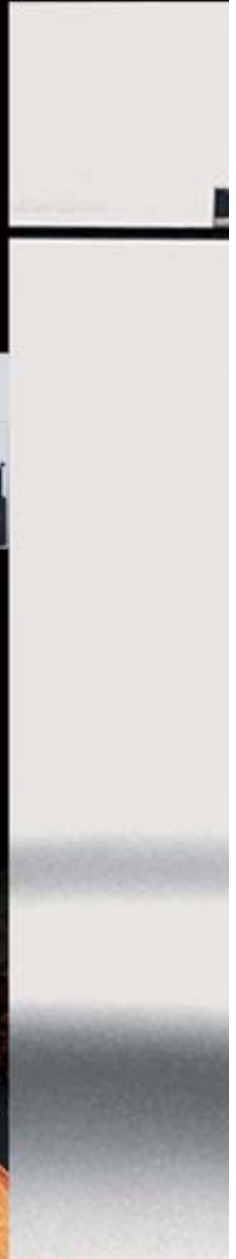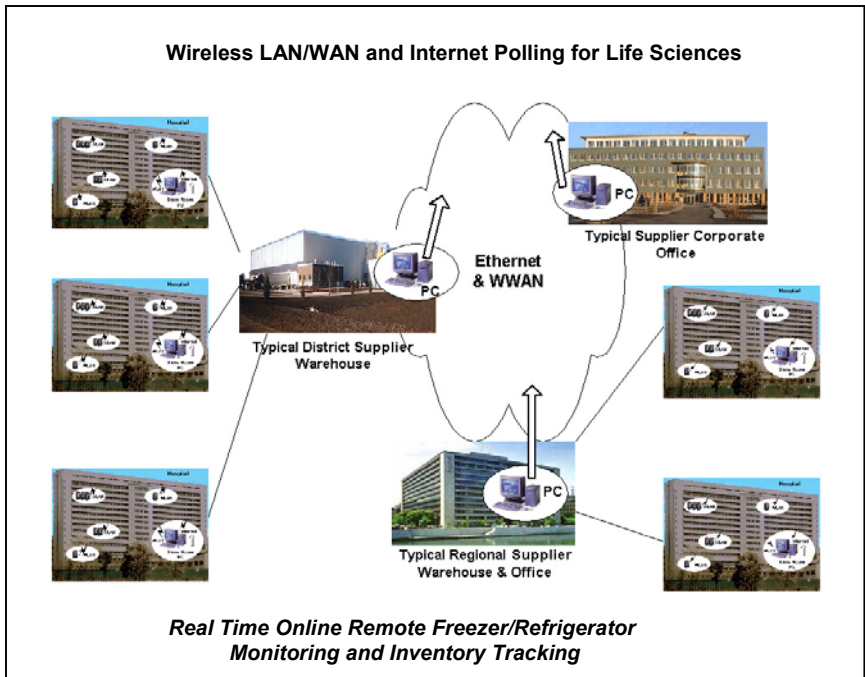# cSTI™

cStar Technologies Inc.

TrakR™ Solutions

Life Sciences

A retrofit solution that wirelessly enables monitoring and inventory tracking of freezers and refrigerators

Wireless LAN/WAN and Internet Polling for Life Sciences

Real Time Online Remote Freezer/Refrigerator Monitoring and Inventory Tracking

TrakR L21 & L28

TrakR L7 & L14

cStar's TrakR series provides an end-to-end wirelessly enabled system that monitors and tracks distribution of life science products in freezers and refrigerators.

TrakRL-7: A card scanning module that can be easily retrofitted to freezers/refrigerators. It works with hand-held devices to store data transmitted by RS232 or Blue Tooth.

- Magnetic-Stripe ISO Card Insert Reader 'clamping type'.
- Bar-Code Reader
- Bright Green LED Display for user instructions
- Door Switch Contacts
- Internal power supply and battery charging circuit
- Battery backed-up.
- 110-volt Power Cord
- Totally Enclosed Metal Casing - Powder Coated Baked Enamel-White
- Four Mounting Screws

WIRELESS ETHERNET ENABLED VERSIONS

TrakRL-14: As L-7 using wireless local area network to store recorded data for forward transmission to main storeroom PC

- Includes a SkyGate WLAN series
- External 'patch-antenna'
- Ethernet connection to WWAN

TrakRL-21: As L-14 incorporating an Electronic Door Lock

- Monitors freezer/refrigerator temperature and compressor running status with monitor signaling the health and welfare of general compressor condition
- Alarms by local audio siren
- Includes wireless time stamped text to PC if door is left open after a preset time or power is disconnected.
- Incorporates wide-angle camera

TrakRL-28: As L-21 incorporating a wide area network capability to report on-line real-time transactions to supplier IT Offices

- Collects up to 200 L-21 model transmissions of abundant freezers/ refrigerators at a single sight
- Provides a single uplink via GSM, GPRS or ARDIS wireless wide area networks
- Incorporates an acoustic antenna system for detection of product removal and retrieval

eTrakR Software: Backend software that runs on the entire TrakR series L-7, L-14, L-21 and L-28.

Attributes in the Main Servicing Storeroom:

- ✓ L-7 model - data is downloaded to a hand-held device via RS232 or Blue Tooth at the freezer/refrigerator and downloaded to storeroom PC.
- ✓ L-14 and L-21 models - data is transferred wirelessly to Main Servicing Store Room PC via Wireless Local Area Network to cStar Multiplexer connected to the PC. This sub-network runs on ISMB 1 (900MHz) or 2 (2.4GHz)
- ✓ Centralized Master Storeroom PC connected to a SkyGate VVS-1000 Multiplexer with an range of approximately 5 miles and a 200-freezer per site capacity.
- ✓ cStar e-TrakR software runs on storeroom PC to monitor activity of product sell-through, manage replacement stocking requirements for space-to-sales, track product shelf-life, time stamp transactions and door open/close activity and verify end-user access and dispensing chronicle. Automatically imparts encrypted data by Ethernet to supplier or manufacturer IT office.
- ✓ Observes and records user name, ID and account numbers.
- ✓ Supervises and records inventory tracking and reporting in supply chain management.

Benefits of TrakR-Equipped Freezers/Refrigerators

- Store, refrigerate and distribute restricted products in an automated, secure and paperless environment.
- Provide remote inventory monitoring with accurate statistical information on product use and sales.
- Monitor freezer/refrigerator temperature failure with fail-safe early alarms.
- Prevent inventory loss from product expiration and shrinkage.
- Access to real time online sales information on encrypted web pages.
- Avoid product sell-outs through timely inventory management.
- Support activity based accounting tracking products to projects, researchers and grants.
- Automated supply chain management; improved operation efficiencies and customer service.

TrakR is available in three simple installation styles: front, side or top panel mounts.

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