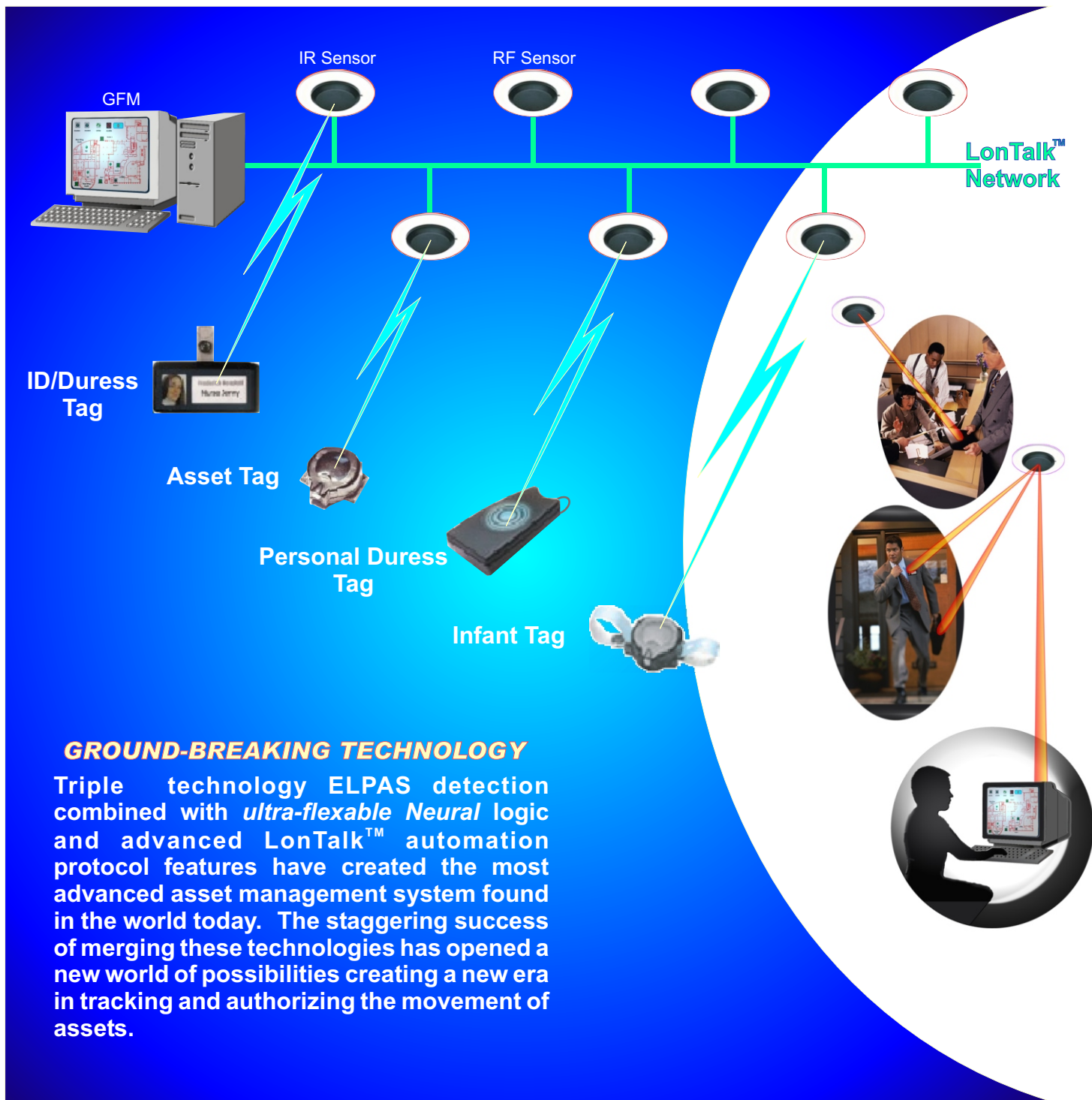




ASSET MANAGEMENT



GROUND-BREAKING TECHNOLOGY

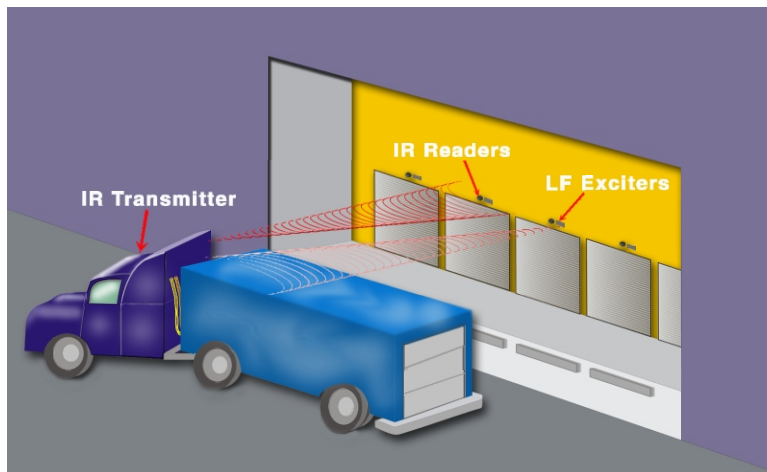
Triple technology ELPAS detection combined with *ultra-flexable Neural* logic and advanced LonTalk™ automation protocol features have created the most advanced asset management system found in the world today. The staggering success of merging these technologies has opened a new world of possibilities creating a new era in tracking and authorizing the movement of assets.



ASSET MANAGEMENT

Asset Matching

Detecting an item or a person wearing a tag or a badge respectively, is not new technology. However, matching a person to an item in thousands of possible combinations is. Postal, Healthcare, Government, Port Authorities and Industry all can benefit from applications matching people to equipment. You don't want a system to cause an alarm when an authorized person removes the item from the premises. You want authorized personnel with authorized equipment to move about freely.



IRFID can be used to automatically detect an authorized delivery. The system verifies a match of the vehicle and driver tags, automatically raising the proper roll-up door, switching cameras to the loading dock and paging, e-mailing or broadcasting a natural voice message over two-way radio or PA system notifying employees of the delivery. This results in more efficient use of manpower savings to the company or agency and increased security.



The ability to match item-to-item, item-to-person or any combination thereof, is a simple matter when IRFID and neural technology are used in conjunction. IRFID provides a reliable and accurate means of tracking people equipment and/or materials while neural technology provides unlimited logic flexibility, freely combining logical rules such as AND, OR to control the condition under which alarms are detected. IRFID and neural technology open an entire new world of possibilities enabling the ability to track and match assets, showing location and even usage.

Personnel tags can detect a persons location, identity, whether moving or idle and even if they have removed their badge. Each personnel badge has a duress button seamless incorporated into the back of the badge providing personal convenience and reassurances. When pressed, IR and RF sensors detect the alarm and transmit it to the neural system. Maps of the area are displayed showing the exact location, a voice message is transmitted over two-way radio notifying describing the type and location the alarm for immediate response.



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Features & Benefits

- › **Patented IRFID technology (Infra-Red and Radio-Frequency Identification)**
provides exact room location and maintains constant communications with person / equipment.
- › **Interactive Graphical User Interface (I-GUI)**
includes realtime map views displaying exact location and identification of person / equipment.
- › **Two button recognition per tag**
Each transmitting several status indicators to control system such as motion, idle, lost/away, low battery and badge removed.
- › **RDR contains onboard transceiver, memory and CPU**
Powered by stand-alone, logical, individualized activation ports.
- › **Open standards architecture - LonTalk™, TCP/IP**
Allows flexible interfacing to over 4,000 manufacturers LonTalk™ technology.
- › **History logging**
Generates reports for statistical and management analysis.
- › **Microsoft SQL database**
Ensures flexibility and adaptability to meet the most demanding needs.
- › **C++ and COM Software Development Kit (SDK)**
Provides all the necessary tools to rapidly develop and deploy customized packages for personalized applications.



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<u>Features</u>	<u>Performance</u>
RF Message Length	2.2 ms @ 19.2 KBPS
RF Range (indoors)	20 m (Omnidirectional per Reader)
RF Range (outdoors)	100 m (Sector of 900 per Reader)
RF Location	RSSI Triangulation
RF Location Accuracy	+ 10m
Tag RF Transmission Method	Narrow Band Crystal Controller (+10ppm)
RF Modulation	ASK or GMSK
LF Exit Detection Zone	Area of 5m dia. @ 2.5m from Exit RDR
LF Response Time	Average - 250ms (max 600ms125KHZ)
LF Frequency	125 KHZ
RF RDR Sensitivity	105 dbm 133MHZ; 103 dbm 916MHZ
RF Power (from TAG antenna)	Peak 0.01mw
RF Frequency	433.9 MHZ / 916.5 MHZ / 919.5 MHZ / 868 MHZ



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<u>Features</u>	<u>Performance</u>
Technology	Triple technology - IR, RF and LF
TempReportingRate	Every 10min until Set-point, after 10 sec
TemperatureSensor	-400 C to +850 C 10 C
MotionDetection	Yes (low light sensitivity)
IRLocation	RSSI manipulation Reader with highest RSSI
IRMessageLength	2.2 ms @ 19.2 KBPS
IRPower	Peak 300mW
IRType	Diffusive Reflection
IRRange	20m (Omnidirectional) - no background
RoomLocation	Absolute (using IR)
TagBatteryLifeTransmissionRateDependant	1-5 years
DataCollection	Yes (2 + 8 on/off and Rs232 input)
TagProgrammableParameters	All (50 parameters)



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<u>Features</u>	<u>Performance</u>
Tag ID Length	18 or 26 bits
Outdoor Operation	Fair
Floor Differentiation	Absolute
TX Error Deflection	IR, RF & LF - CRC 8
Tag Tamper Sensor	Contact-less
Reader Connection	Backbone cable 2-pair, 18AWG runs between junction boxes. Readers (up to 4) connected to junction box with Rj11, 26AWG, 3-pair cable
Reader Infrastructure	Open Architecture LonTalk Network with Routers to 10/100BT Network
Network	Open standard - seamless integration with Neural Technology
Multiple remote site Operation	Via existing IT (WAN, Internet, LAN, etc.)
Server-less Operation	Location logic implemented by Reader/ Controllers
Call Button on Tag	One or Two
Transmission Rate at Motion	2 to 60 sec
Transmission Rate at Motionless	10 to 1800 sec



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<u>Features</u>	<u>Performance</u>
SW Applications	Asset Tracking, Sentinel, BabyMatch, Time & Attendances, Access control, etc.
Stand Alone Reader Operation	Readers can independently sense and activate external devices
Reader to Reader Control Capabilities	Communications between Readers for execution of complex logic rules
Tag Size	77x37x6 mm, 28mm dia x 11 mm