

# Low-Cost Satellite Tracking Offered

AeroAstro, a micro-satellite supplier, has launched a new device for tracking goods in transit that costs just \$349.

Nov. 5, 2002 -- Visibility has its price, but that price just came down quite a bit. AeroAstro, an Ashburn, Va., company that supplies micro-satellite and communications technologies, has launched a new satellite-tracking device that costs just \$349. Qualcomm's OmniTracs mobile communications system, by contrast, runs upwards of \$2,000.

AeroAstro's S 10-20 asset tracking unit is aimed at the low-end of the trucking and logistics market. Unlike Qualcomm's system, it doesn't provide two-way communication, and it can't transmit as much data. The device is designed simply to transmit the location of a trailer. It consumes very little power, so it doesn't need to be connected to a power source in the cab.

"Companies often lose trailers; it's a big problem in the industry," says Todd Harrison, a spokesperson for AeroAstro. "Someone drops a trailer off somewhere in the middle of no where, and you never see it again."

The S 10-20 is a GPS receiver, satellite transmitter, microcontroller, and long-life battery packed into a weatherproof box that measures 8.4 inches by 5.25 inches by 1 inch high. The company says the battery will last four and a half years. AeroAstro has designed the product primarily for tracking tractor-trailers.

AeroAstro has been in business for 14 years. It specializes in building micro-satellites and has done work for NASA, the United States Air Force, universities and private industry. The new product is a spin-off of technology developed for radio transmitters on satellites.

The S 10-20 is based on AeroAstro's Sensor Enabled Notification System (SENS), which uses the existing constellation of Globalstar satellites to transmit data from virtually any location in the world. The SENS service is scheduled to begin in all of North America by the end of the year. The service will be expanded to Europe, South America, and Asia next year.

A truck's position is sent up to a satellite and then back down to a Globalstar ground station. From there, it flows over the Internet to a secure site where fleet managers can view the data. Harrison says AeroAstro can customize the way data is presented or provide integration services, so the data can flow into an existing fleet management software application.

In addition to the \$349 for the S 10-20, companies must also pay \$9.50 per month, per device for use of the SENS network. The price includes two transmissions per day. AeroAstro is working with Point Six to integrate an RFID tag into its unit. This would enable geo-fencing applications -- making sure an asset is where it's supposed to be -- without constantly using the GPS receiver, which conserves battery life.

The system could be set up to alert a fleet manager when a trailer has passed a checkpoint or passed the entrance or exit of a depot or truck yard. The company is working with value-added resellers who are developing a variety of sensors that can be combined with the S 10-20 tracking system.

An RFID electronic seal on the trailer could signal a receiver inside the S 10-20 that someone has opened the door without authorization. Or a sensor could signal that the temperature inside the trailer has risen above a preset limit. That information could then be broadcast instantly via satellite to a fleet manager.

"The reason we are able to develop technology that costs so much less and is applicable to different uses is that our transmitter unit consumes very little power," says Harrison. "That's what opens up the market for us."

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