

## What do you need for QarVision™?

The Qameleon QarVision™ Elevator Performance Analyzer is a flexible, modular system that lets you customize it for your needs. (Please see our Website, [www.Qameleon.com](http://www.Qameleon.com) for a description of how the system works.) The QarVision™ system is sold as individual components, enabling you to purchase exactly what you need now, and add components as your needs grow.

### Basic QarVision™ system



A PDA or laptop displays all of the system's information to the user, and processes all of the user inputs. It also retrieves the historical information from the QarVision™ module. You can watch what is happening in the elevator car, from the machine room, or other location within WiFi range.

The QarVision™ module is located inside or on top of the elevator car, and serves as the central control for the complete system. It processes input from all of the Sensors, and creates all of the system information. It continuously monitors the motion of the elevator, builds a history of its operation, and stores the data internally. Acceleration/deceleration, speed, and gate operation are measured by this module.

External sensors provide information about the drive system (motor current, motor temperature, hydraulic pressure, brake operation, relay status), the machine room (temperature), and current used in the car.

The Machine Room Monitor is located in the machine room, and connects the external sensors wirelessly to the QarVision™ module in the elevator car. All readings are accessed and correlated by the QarVision™ module

## What do you need?

The QarVision™ system is supplied as separate components that can be purchased as needed. All of the components can be installed permanently, or located temporarily when needed.

	What do you want to do?	What do you need?
<b>A</b>	I want to monitor the performance, and track the usage, of one elevator car. (Acceleration/deceleration, travel time, speed, total usage, and a complete record of every trip.)	1 - QarVision™ module 1 - Windows Mobile PDA and/or WiFi-enabled Windows computer 1 - AC adapter (included with QarVision™ module), 12 volt battery, or 10 to 18 VDC from the elevator. 1 - copy of EPM graphical analysis software
<b>B</b>	Additionally, I want to monitor the gate activity (opening and closing times, dwell, and car movement relative to the door actions).	Add to A, 1 - Gate Position Sensor
	I want to monitor the performance of one elevator car (as in A), and simultaneously monitor and record the drive system parameters (motor temperature, motor current, hydraulic pressure, brake or machine room temperature), current to the car, energy used, and the status of selected relays.	Add to B, 1 - Machine Room Monitor 2 - Current Sensors 2 - Temperature Sensors 1 - Hydraulic Pressure Sensor 1 - Relay Sensors 1 - Antenna Extension Cable

In addition to the system described in the table above, we can provide other options including:

- Weatherproof LAN option – enables you to connect the QarVision™ module directly to an Ethernet LAN in the car.
- Interface to a building WiFi network.
- Integration with a building or energy management system.
- Weatherproof Case – rugged case to hold the QarVision™ module, Machine Room Monitor, sensors, PDA, charger and antenna.
- QWIC-Cell™ Cellular Interface – enables you to operate the QarVision™ system from anywhere in the world over the Internet. Uses GSM cellular data service. Requires account from a GSM provider.

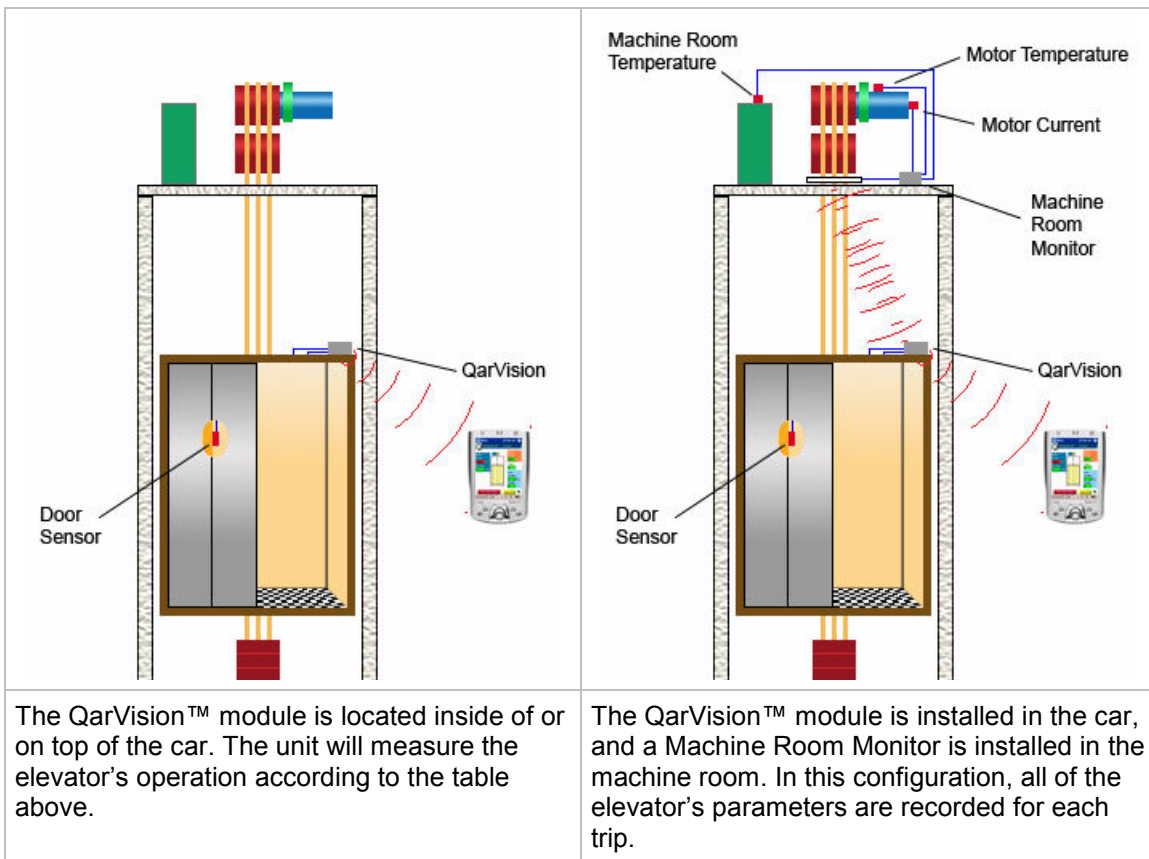
If you wish, we can provide you with a PDA or netbook computer, with all of the necessary software installed. Please contact us for details.

## How is QarVision™ installed?

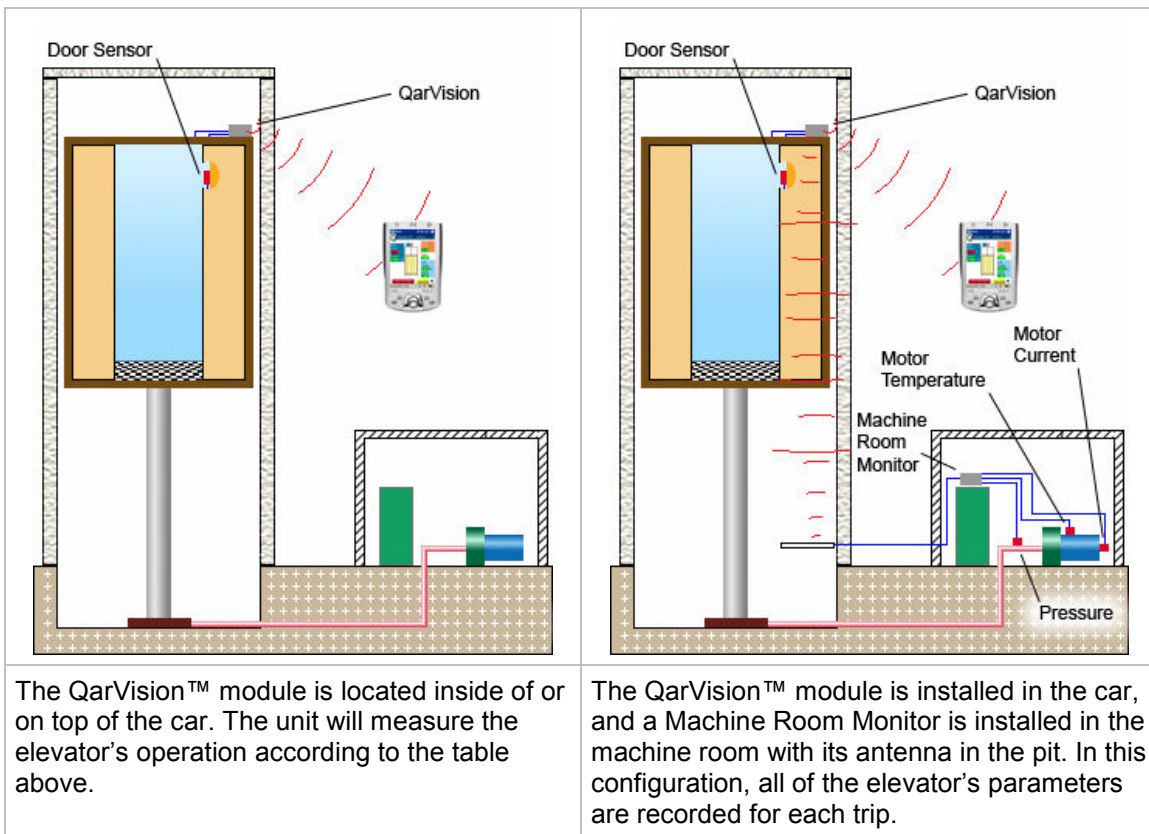
The components that are needed for the QarVision™ system depend on what you want to measure simultaneously and the type of elevator you are monitoring.

What is measured?	QarVision™ module in Car	QarVision™ module in Car and Machine Room Monitor in Machine Room
Acceleration/Deceleration	Yes	Yes
Trip duration	Yes	Yes
Total usage time	Yes	Yes
Number of trips	Yes	Yes
Number of gate cycles	Yes	Yes
Brake/Machine Room Temperature		Yes
Motor current		Yes
Secondary Current (car)		Yes
Motor temperature		Yes
Hydraulic Pressure		Yes
Gate opening/closing time	Yes	Yes
Speed	Yes	Yes
Idle Time	Yes	Yes
Relay/Brake Status		Yes
Energy used by the drive and the car		Yes

## Traction Elevators



## Hydraulic Elevators



The QarVision™ system can be customized for your particular needs. We have worked with our customers to provide different sensors, interface to existing systems, provide additional remote connectivity (building WiFi, DSL, municipal WiFi, Ethernet LAN, cellular), and even translate the user interface into different languages.

Please contact us at [info@Qameleon.com](mailto:info@Qameleon.com) to discuss your individual needs.