



## White Paper

### Cellular Data Control Technology Prevents Overage Charges

When using cellular technology for alarm communication, one thing alarm dealers fear is the cost of excessive overage charges. One way to mitigate excessive overage costs is by using advanced DMP panel technology that is aware of the message types and volume of data being sent and then takes steps to prevent running up significant data costs.

For security system installers/integrators and their central station monitoring services, there is a very positive aspect for controlling alarm signal data transmission. This white paper:

- Briefly describes the pros of cellular communication and one con of overage costs
- Explains how potentially significant cellular service overage costs can occur
- Describes a DMP panel feature that prevents these overage costs

#### Section I. Cellular Pros and Con

Customers, both residential and commercial, are increasingly using a cellular connection for their security systems' communication links to the central station. From a security standpoint, cellular communication is less susceptible to physical tampering since there are no wires to cut. It also avoids the time and cost of routing a physical phone connection to the panel.

From a features or convenience perspective, having a cellular connection enables a host of mobile features. System owners gain the ability to monitor and manage their systems via their mobile devices or internet-connected computers. The cost of cell service for the panel is typically less than the cost of a physical phone landline.

Security system installers/integrators prefer cellular connections because of the reduced installation time and secure consistent data communication for the system.

Some of the first cellular communicators on the market had an issue that resulted in a runaway communicator repetitively sending unnecessary signals to the central station. These runaway communicators could accumulate significant data overage charges, which the system provider or central station would typically have to absorb. Advanced DMP cellular data control solves this potential issue.

#### Section II. The Cost of a Runaway Communicator

Cell phone customers who review their bills sometimes find an added monthly fee for data overages. When the customer exceeds their monthly allocation, they are assessed for the additional usage. Those costs are typically in the range of \$15 per additional GB of data.

Security systems have relatively low data-transmission needs and therefore low costs for cellular plans. On the other hand, the cost of overage data can be vastly more expensive. In rare and unusual runaway situations, a security system can consume a significant amount of cellular data. For example, a door or window contact may fail and become a swinger that constantly toggles open and closed, sending a runaway stream of signals to the central station.

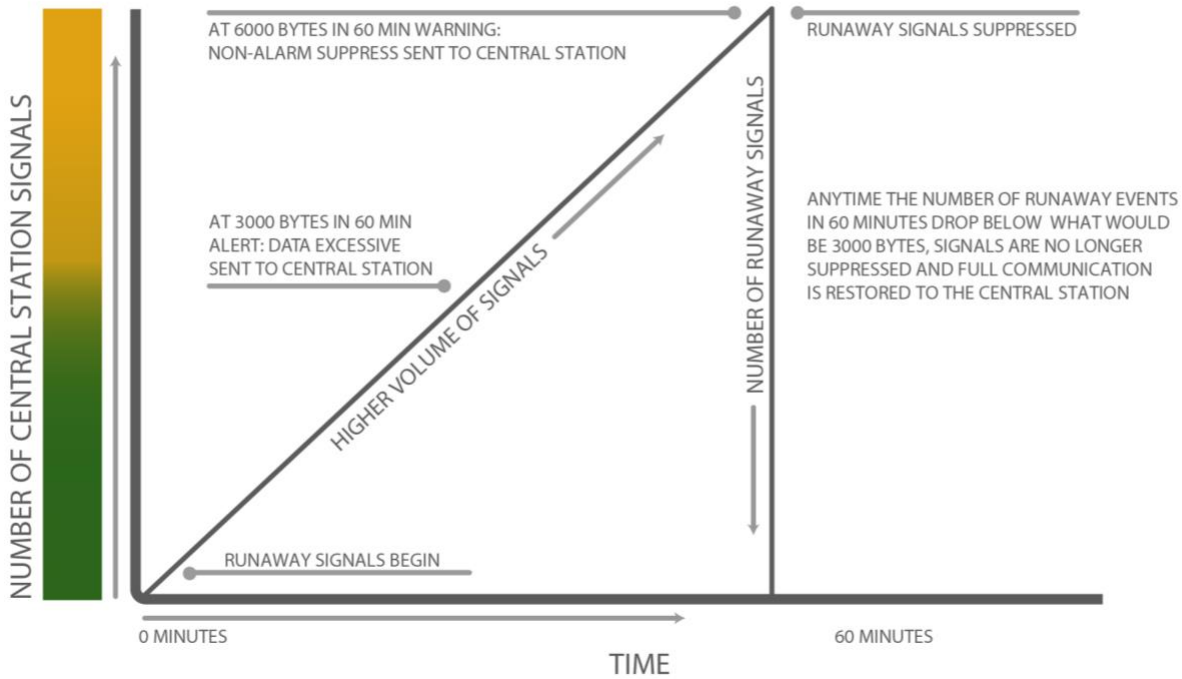
A runaway panel can easily accumulate \$1,000 in overage charges in a month.

#### Section III. Automatic Cellular Data Control

DMP panels include a feature that prevents this costly scenario: Cellular Data Control. The panel automatically identifies excessive signaling and alerts the central station of the problem so the situation can be investigated and corrected.

For example, as shown below, if a high volume of runaway fault/restore signals are sent to the central station in less than one hour, an ALERT signal is sent that a runaway is occurring. If the high volume doubles within the same hour, the panel sends a WARNING to the central station and then automatically suppresses sending the runaway signals. Once the runaway is serviced or one hour of normal activity occurs, suppression ceases.

EXAMPLE RUNAWAY SIGNALS TO CENTRAL STATION



**Note:** During runaway signal suppression above, the panel will always send fire or burglar alarm signals to the central station. For panels that have multiple communication path options (some DMP panels support up to eight), all signals can continue to be sent via one of the other, non-cellular paths.

**Section IV. Summary**

Cellular Data Control provides confidence that system installers/integrators and central stations can avoid high, unexpected overage charges resulting from a runaway system.

**Technical Note: Data Suppression During Installations**

To allow technicians to test zone signals to the central station at the time of installation, data is not suppressed for 30 minutes after the stop routine is run.

**Compliance:** The XR550 Series control panel is UL Listed for Commercial and Residential Fire and Burglary. It is also CSFM listed as a household and commercial control unit (7165-1157:0135 and 7165-1157:0134). Current listing information can be found at [DMP.com/Compliance](http://DMP.com/Compliance).

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