Data Logger for the Pharmaceutical Industry

Pharmaceutical industry faces a long list of requirements which must be absolutely fulfilled without exceptions. How the medicaments are stored influences their efficiency and quality directly and may be of vital importance for the customers and patients. There are no uniform storage requirements for all the existing kinds of drugs and medicines. Nevertheless many of them must be kept strictly within certain temperatures and under certain conditions.

To check how accurate the functioning of all the facilities and equipment in the pharmacy is, turns out to be difficult, but not impossible. With the help of a device, like data logger it may be clear either the conditions are optimal or should be
changed. Temperature and humidity are the necessary DMP standard elements. Each pharmacy needs to be validated. To avoid unnecessary extra costs (like extra temperature and humidity sensors) it is necessary to conduct the monitoring of the storeroom. Data loggers installed for a few days (3-5) help to get a “temperature map” which will help to install the sensors correctly: from the one side, to avoid too many of them in one place, from the other – not to miss the places where the temperatures may fluctuate. Data loggers helps to find out what the dynamics of temperature regime changes is, what areas are the most critical ones, how stable the temperature regime in a pharmacy during some time is, and of course to check the compliance with the regulations and norms.

Data loggers may also be installed inside the vehicles transporting the pharmaceutical products, thus providing full control and maintenance of a necessary condition of the products.

In it necessary to remember that in the pharmaceutical storerooms and vehicles transporting them, there is a special microclimate different form the environmental conditions. Data loggers equipped with durable temperature and humidity sensors are capable of registering the data inside the rooms; all the data (temperature, humidity, dew point) is saved, which allows the staff to keep the situation under permanent control and make timely changes if necessary after analyzing the readings.

Automated registration and storage of information, autonomous power supply, possibility of connection to the PC and taking the readings remotely through the wire or wireless network, wide range of operating temperatures, high accuracy, long battery service life, absolute independence on the power supply interruptions, free customer choice of the measurement intervals etc – these are the advantage which a small modern device that may help to prevent quite big problems, possesses.

Nowadays you may even find a small USB data logger. Visually it is a small device, but its advantage is that it can be used in the pharmacy fridges, keeping the temperature inside the fridge under constant control.

No matter which data logger you may choose, it in any case helps to avoid errors, which often happen when the reading are taken manually. The reading from the thermometer taken by the operator may be almost accurate, but even small inaccuracies may be of a crucial importance when it goes about very sensitive to temperature medical preparations.

Modern automatic wireless data loggers may even perform a function of collecting the information from the other data loggers (which are remote) and storing it. The function of setting the permissible limits means that any time the temperature is beyond the limits, a sound indication comes from the data logger, which helps to avoid procrastination and to react quickly.