

Climax Debuts the F1 Security Systems with World-Leading 2-Km Communication Range Record-Breaking RF Range, Relentless Reliability, and Remarkable Battery Lifetime

Taipei, Taiwan—May 9, 2014—Climax today launched the F1 security systems that feature world-leading radio frequency (RF) range of 2 kilometers (1.5 miles), the longest of its kind currently available in the security industry.

This major breakthrough in RF wireless technology is notably well-balanced, as it has massively extended RF range without compromising system reliability in any way. Rather, Climax's sophisticated RF technology, sharpened after decades-long experience, has empowered the F1 security systems to successfully achieve an optimum combination of record-breaking RF range, relentless reliability, and remarkable battery lifetime. These unparalleled benefits have positioned the F1 systems among the most competitive inventions ever seen in the security world.

Two-kilometer communication range

How do the F1 systems attain such astonishing long-range communication?

The 2-kilometer communication range is not achieved by boosting RF power transmission, but is the fruit of consummate antenna design coupled with maximized receiver sensitivity, which lays a premium foundation for the optimized bandwidth allocation that eventually leads to this phenomenal breakthrough in RF range.

This unprecedented RF communication range allows the F1 control panels and devices to be deployed across vast expanses, creating immense advantages for the installer to flexibly set up the F1 systems on large or complicated premises.

Enhanced reliability and stability

Climax has not blindly pursued super long-range RF communication at the expense of the reliability of system communication.

It is commonly known that the stability of wireless systems is primarily dictated by frequency shifts. While optimized bandwidth allocation is necessary for the creation of long RF range, frequency stability is indispensable to the reliability of communication within extended RF range. Climax's ATAE technology effectively enhances frequency stability by alleviating temperature and aging effects on RF devices, thereby guaranteeing the reliability of the F1 systems' communication networks.

Speedy response and longer battery life

As the F1 systems' capabilities do not result from boosted RF power transmission but from ingenious design, they do not consume more power even when transmitting signals across larger areas. Furthermore, because the F1 systems boast fast RF transmission mechanism to deliver messages to control panels speedily, the devices' operation actually becomes easy on their batteries. This advantage will allow the devices' battery life to last longer and significantly reduce maintenance costs.

Secure message encryption

The F1 control panels and devices utilize Climax's uniquely constructed "Attack Shield" communications protocol to protect signal transmission. This robust encryption protocol pre-empties any attempts to decipher or steal messages transmitted from sensors to control panels.

Currently available frequencies

The narrow-band 868 and 433 frequencies are used for the F1 systems. Other frequencies can be adopted upon request.

*The F1 systems' RF communication range is 2 km/1.5 miles at 2 m/6.6 ft.

About Climax

Climax Technology Co., Ltd. was founded in 1985 and is now a leading supplier of top-quality wireless security systems and medical alarms in America, Europe and Asia. Our broad range of products is all designed, developed and manufactured in-house. Climax has relentlessly pursued perfection in technology, production and service with the objective of providing the best protection and care for every home and individual.

