



Orange County Fire Authority Community Risk Reduction Department USE OF INFORMATIONAL BULLETIN 01-11

Effective immediately, alarm panels/communicator modules utilizing cellular, IP, mesh network, or 1- or 2-way radio technology *as a single path of communication* in accordance with 2013 NFPA 72 Section 26.6.3.1.5 no longer require separate communicator device pre-approval via the process described in Informational Bulletin 01-11 (see page 2) prior to submittal of plans for the alarm/monitoring system using that device.

Single path communicators already evaluated by OCFA

For systems using a device that has already been evaluated by OCFA, continue to include the pre-approval letter (available on the OCFA website) on the alarm/monitoring system plans submitted for review. These devices are:

- DMP 263C
- DMP 463C
- 3G3070CF
- 7788F
- DMP 463G
- IPGSM-4G
- GS3055-ICF
- TG-7FS S

The pre-approval letter is *not* required on the plans when the device is being used in accordance with its listing as the primary or secondary means of communication in a *dual path* system.

Single path communicators that have *not* been evaluated by OCFA

For all projects utilizing cellular, IP, mesh, or 1- or 2-way radio technology where the communicator is *not* one of the eight devices listed in the section above, a copy of the manufacturer's installation manual containing testing procedures and specifications shall be available for the inspector's use at the job site. Note this requirement prominently on the plan.

Single path communication technologies other than cellular, IP, mesh network, or 1- or 2-way radio

Systems using other technologies as a *single path of communication* shall require communicator device pre-approval in accordance with OCFA Informational Bulletin 01-11 prior to submittal of plans for the alarm/monitoring system using that device. Please see page 2.



Orange County Fire Authority

Fire Prevention Division

INFORMATIONAL BULLETIN 01-11

Subject: Fire Alarm Systems Using Wireless or Other Technology as a Single Path of Communication

Besides the common DACT, which traditionally utilizes two hard-wired phone lines for signal transmission, 2013 NFPA 72 permits the use of other technologies for communication between alarm panels and central station facilities and allows a single path of communication in addition to dual path systems using redundant phone lines or two different technologies (e.g., cellular and hardwire phone line).

Prior to submittal of plans for the installation of single-path technology components at protected premises, a review of the proposed single path technology will be required. Once it has been demonstrated that the technology provides a level of reliability and supervision at least as good as that described in NFPA 72 for established technologies, a letter will be issued from the OCFA indicating approval. The applicant shall include the letter on the plans for each project utilizing that particular type of technology to facilitate review.

The following, at a minimum, shall be required for consideration as part of the pre-submittal review:

- List the type of data transmission technologies used and clearly identify each step in how alarm information travels from the protected premises to the central station and back. Identify which portions of the system are proprietary, leased, or part of an established public or major private telephone, cable, or internet service company. Discuss potential deficiencies or weak links in the system and how the technology safeguards against these. *NFPA 72 Section 26.6.1, 26.6.3*
- Identify the method of ensuring signal and data integrity. Specify method 1 (repetition), 2 (parity), or 3 (other). If 3, describe in detail the means of ensuring data integrity and level of accuracy achieved. *Section 26.6.3.1.13*
- Provide UL/FM and CSFM listing sheets showing that the communicator is approved for use as a single communication path for fire applications. *Section 26.6.3.1.1*
- Data throttling or other prioritization features of the communicator shall not inhibit transmission of any signals from the alarm system beyond the maximum duration permitted by NFPA 72 26.6.3.1.10. If the system has this feature, either 1) provide documentation from the manufacturer stating that this feature can be disabled, or 2) provide documentation from the manufacturer showing that the maximum possible delay for any type of signal is less than that permitted by NFPA 72.
- If the central station will be employing new technology or equipment beyond the scope of its current certificate, provide a new UL certificate showing that it is listed for the new technology.
- If the system utilizes radio repeater or receiving stations, provide documentation stating that protection, monitoring, and control of such stations and equipment complies with Chapter 10 and Section 26.6.3.3.
- Demonstrate the following per sections 26.6.3.1.5, 26.6.3.1.12, and 26.6.3.1.13.1:
 - Any failure of the communication path shall be annunciated at the central station within 60 minutes.
 - Incomplete, corrupted, or other signal errors will be recorded and displayed at the central station.
 - The record and display rate of subsequent alarms will not be less than one every 10 seconds.
- State how each of the performance requirements will be tested and compliance demonstrated to the OCFA inspector (e.g., How will signal strength be verified? How will data integrity be measured? Etc.). This testing information will also be required to be included on all plans utilizing this technology.

Presubmittal review of new technologies shall be done under fee code PR905. Improvements limited to conversion of existing DACT communicators shall be reviewed under PR500. All other plans will be reviewed under PR500, PR510, PR520, or PR530 depending on the number of initiating and notification appliances involved in the scope of work.