

What's So Special About UL, IP, and MCBF?

Most all of us know what **FYI**, **LOL** and **BYOB** mean, right? These are acronyms, and they are used in every day conversation by millions of people.

As a security professional specifying or purchasing entrance control solutions like turnstiles, portals, and gates, maybe you should also be aware of an entirely different set of acronyms. You may have heard of these, and are wondering they apply to us as security professionals?

In this article we will take a look at a few of these common security acronyms and how they relate to entrance control products like pedestrian turnstiles, optical turnstiles, portals, and vehicle gates. Of course we are speaking about **UL** (Underwriter's Lab), **IP** (Internet Protocol) and **MCBF** (Mean Cycles Between Failure).

1. **MCBF: Mean Cycles Between Failure.** This is a measurement of how many average cycles (uses) of the device (turnstile, portal, gate) will occur between expected failures, subject to normal typical maintenance. It's a very useful measurement to determine the reliability of a system. MCBF should be strongly considered when evaluating competing systems. Ask your entrance control professional for the MCBF on the products he/she represents. Oftentimes MCBF's are calculated in lab conditions - ideally in a controlled environment using objective measurements and date. Sometimes the statistic is drawn from client reports in the field. Both of these methods can be reliable if the data is accurate. By the way, we recommend always asking for written verification of the data including detailed explanation of the testing procedure used.

In any case, you always want MCBF data that relates to the entire system, when used as intended. Sometimes data is estimated based upon the MCBF's of various components of the system (motors, sensors, boards, etc.). Preferably, you want to know the true MCBF of the entire system of components when working together as a security entrance control product.

Why is MCBF important when evaluating security entrance control choices? It predicts the reliability of the installed products in the intended security environment. One can easily estimate the life expectancy of an entrance control system by analyzing MCBF. For example, if we know that we will have an average of 2,000 passages per day (in/out) and the product is rated for, say 5 million MCBF, we can reliably predict few unexpected problems with this product for 2,500 days – approximately 10 years - if running 5 days per week. This data can be used to help us with other important evaluation criteria such as Total Cost of Ownership, when comparing competing systems.

2. **UL: Underwriters Laboratories.** UL LLC is an American worldwide safety consulting and certification company, and sets standards for all types of electrical and electronic products, including entrance control products like turnstiles and gates. In the entrance control manufacturing world, UL certification is difficult to achieve and you can be sure that any manufacturer carrying a UL certification has passed stringent tests for their devices, their systems, and even their manufacturing sites – which must be annually inspected. Turnstiles, Gates, and portals carrying the UL sticker have been certified for both electrical and

mechanical safety. This means that your users are not only protected against electrical failures (i.e.; short circuits, unintended shocking) but also against accidental closure/entrapment inside the lanes. UL specs require careful inspection of included safety features/devices and the elimination of all potential pinch points in the product. In the turnstile and gate world UL325 and UL2593 are the benchmark UL certifications that professionals expect.

Some manufacturers may point to the UL certifications of the various electrical components inside their system, thereby deeming their product “safe”. This is not sufficient for the trained security designer. We instead look for UL certification of the entire system of components when working together as a turnstile, optical turnstile, security gate or portal, in the security environment. You can easily verify UL listing of a product by visiting the UL website, [“UL listed Turnstile, Gates, and Door Companies”](#).

Why is a UL certification important for the entrance control specifier or buyer? It’s important for safety, performance, insurance and liability reasons. Also, more and more AHJ’s (Authorities Having Jurisdiction) will require UL certification, documentation and even visible UL stickers on any installed products. These fire/building inspectors rely upon the reputation of UL to give them confidence in health & life safety issues before issuing fire/building/occupancy permits for newly constructed or renovated properties.

3. **IP: Internet Protocol.** Very simply, IP is the method that allows data to be sent from one computer to another using the internet. IP Ready security entrance control equipment has its own IP address and is networkable; and can be configured, managed and monitored via the client’s security network or via a closed network offered by the security equipment manufacturer. IP Ready (AKA Network Ready) security equipment is typically less costly to maintain and diagnose when trouble occurs. Support can be accessed remotely over the internet using a VPN in many cases. Even in cases where a client elects not to tie in to a network at the time of turnstile or portal installation, there is an inherent value by having a “future proof” installation. The network cables can be run to the products and left for future networks to be installed at a later date, if and when so desired. Firmware can be automatically updated, and service issues can be prevented with maintenance notifications.

Why should you specify IP (Network) Ready products for your security entrance control needs? Optical turnstiles, security lanes, speedgates, vehicle parking gates and many other products that reside on a network allow for greater control and visibility to the enterprise security director and staff. Statistics, control, event monitoring, and security staff can be more effectively managed. The result is a more efficient, reliable, and more secure environment.

Now I have a question for you: Do you know of any other entrance control acronyms that security professionals should learn more about? Please leave me yours in the comments section below. I look forward to it.

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