



P&C Communications Ltd

P&C Communications have over 25 years' experience in delivering complete business solutions including: - Telephony, Unified Communications, Network Infrastructures, Wide Area Networks and Wireless

Wireless Surveys and Network Health Checks

Our strategic partnerships with market leading WLAN vendors enable us to design full solutions starting from an initial survey through to design, installation & commissioning, post install testing and annual support including annual health checks. Whether you are planning to implement a new wireless network, or you require assistance in troubleshooting an existing Wireless network.

You need the engagement of a wireless specialist to ensure that the network is fit for purpose and that full coverage is achieved. In order to fully understand the undertaking, assessments need to be made to guarantee the performance of the solution within your own unique environment.

What type of survey?

So, what comes next? What is a wireless survey and what type do you choose? The first consideration is whether to choose a predictive or on-site survey. Wireless surveys take many forms and choosing the right one for you is both a technical and commercial decision worth a great deal of consideration.

A predictive site survey is often referred to as a remote site survey, it is completed using electronic site plans and some very intuitive wireless software. This is an excellent way to establish the approximate number of access points required to achieve optimum coverage and identify the best locations for each access point.

There are some great benefits to a predictive site survey, as this type of survey is done remotely it is more commercially attractive than a full on-site survey completed by a fully qualified RF Engineer. For reasonably non-complex environments this may be enough to meet your needs, however on average the results are around 85% accurate.

If your environment requires a high degree of accuracy, then a full on-site survey would be preferable. The key word to remember here is 'predictive' although this type of survey is reasonably accurate and sufficient for certain environments it does not measure or trace the source of any RF interference. Interference is a very common issue for many wireless deployments and understanding and mitigating that in a business-critical environment is essential.

When choosing a wireless survey, it is essentially to understand three things. The number of access points required to provide full coverage across the required areas in the building, the number of concurrent users in relation to the number of access points and RF interference.

Failure to fully understand these three key elements often cause performance issues across the network. It is also important to point out that a predictive survey will not be accurate in calculating the wireless signal penetration of building materials. This could be particularly thick walls, concrete floors and lift shafts.

The Importance of a Wireless Survey

At P&C Communications, our team of engineers pride themselves on the detailed knowledge of a vast range of working environments. Each environment is different and can present certain challenges that can lead to significant loss of signal even when moving from one area to another within the building.

Even a relatively minor loss of signal (around -3Db) in terms of Radio Frequency can potentially reduce your overall signal strength by 50%. Identifying potential contributors to poor RF performance within your network is extremely important whether you are deploying a completely new network or addressing performance within an existing environment. Our engineering team at P&C assess and monitor various signal strengths achievable within your wireless environment by using a variety of specialist software and equipment to identify any potential coverage issues, blackspots or causes of interference.

How much should you pay?

Due to the complexity of an on-site survey this type of survey will have an associated cost. Compared to that of a predictive survey which can often be generated free of charge or at a relatively low cost.

It is understandable that paying for a wireless survey may be prohibitive for some budget conscious businesses. This is when businesses consider the complexity of their environment and how business critical the network is.

Opting for a free or lower cost option may be appealing and of course avoids the need for a relatively modest upfront investment at the beginning of a project. The question remains that there could be consequences further down the line and unforeseen costs to resolve issues that were not understood at the beginning. Can something 'Free' cost you money?

Wireless surveys can vary considerably both in the associated cost and the quality of the output. Not all surveys are the same and so it is extremely important that you seek the guidance from specialist. The likelihood is that if a survey is free or very cheap the survey will be speculative, and the accuracy will be poor. P&C Communications offer guaranteed coverage with every on-site survey, a testament to our confidence and capability.



P&C not only offer a full coverage guarantee, we also provide a full and comprehensive document which outlines the findings of the survey and which also provides all the information you will need to progress with the project.

P&C have been designing wireless networks for many years and firmly believe that a full and comprehensive survey is the only way to guarantee excellent performance.

If following the survey there is progression to the implementation of the proposed wireless network, P&C will provide a 50% rebate of the initial survey cost upon completion and handover of the network. Fully understanding the environment during the initial stages of the project is crucial to avoid potential surprises further down the line.

For more information, or to arrange your Wireless Survey or Network Health Check, call our team now on 01704 542 420 or email us at info@p-ccomms.com