



Why is there a problem with Digital Communicators using the new 21st Century Network?

The main issue discovered by British Telecom and the Security Industry when testing Digital Communicators over simulated 21CN systems was a timing delay. Similar delays have been experienced recently with least-cost routing. Within the new 21CN network these delay times cannot be guaranteed. A Digital Communicator needs to be acknowledged within a specific time-frame. This acknowledgement or confirmation of delivery is known as a hand-shake or kiss off. If an acknowledgement is not received within a specific time by the Digital Communicator it won't know that its message was received and it will dial again and again until all its attempts are used up. The symptom of this is a call charge on the phone bill for every attempt e.g. instead of one event call costing 12p* the phone bill may list ten events each costing 12p for every set, unset and alarm delivered to the ARC. Some Digi's can dial up to ninety nine call attempts before shutting down.

*other networks may charge a call set up fee in addition to higher call charges

How can CSL guarantee DigiPlus® will operate on all 21CN telephone systems?

DigiPlus® takes the Digital Communicator call and routes it via the CSL Gemini Network using a 300 baud modem call. Modems are more 'intelligent' than Digital Communicators and developed specifically to handle network transit delays far in excess of anything that 21CN will ever cause. Furthermore 300 baud has been selected because this is the most robust modem protocol to address digitisation issues inherent in the design of 21CN. DigiPlus® 'modulates' alarm messages in their entirety to receiving modems in much the same way as a conversation. Bits that are missed due to line interference and noise are simply repeated until the whole message is received and understood. CSL's Gemini network then delivers the alarm message into the appropriate ARC using established, dedicated radio and kilo-stream links directly into the ARC alarm handling systems.

Can I use it with 30 year old Digital Communicators?

Yes, any existing Digital Communicator can have DigiPlus® connected to it, so there's no need to throw away perfectly good hardware that you can now make 21CN proof.

How can you claim it will only take five minutes to install and commission?

DigiPlus® has six wired connections, these are +/- 12v power, telephone line in and telephone line out to the DigiCom. Programming is carried out by pressing one button on the unit upon which it learns its parameters. Finally the alarm system's signalling is tested as normal through to the ARC. We would expect that this process would add no more than 5 minutes to a standard Routine Maintenance visit.

I have a small number of systems using extended format will these work with DigiPlus®?

No. There is a small percentage of Digital Communicators where extended format signalling (e.g. Contact ID and SIA) is used. The vast majority of UK Digital Communicators use DTMF fast format signalling and it is this mass market that DigiPlus® has been designed for.



Is DigiPlus® compatible with my remote diagnostics/servicing over the PSTN?

Yes. The DigiPlus® knows when your Digimodem is making an outbound upload/download (UDL) call and ignores it. Also any remote call into the Digimodem will not be interrupted by DigiPlus®. But should an alarm be generated during a UDL call DigiPlus® is ready to take the resulting alarm call and pass it as normal via CSL's Gemini network and on to the ARC.

I already use 0800 numbers for Digs so why would I benefit from DigiPlus®?

Then you will understand the benefits of fixed pricing for your end users. However, simply having 0800 numbers will not make your Digital Communicators operate over 21 CN telephone systems. Also you are taking a risk in the event of runaway Digital Communicator calls, you will be charged for 10 calls instead of 1 until you get your next bill and notice it.

What is the power consumption drawn from my control panel?

We understand that keeping current consumption as low as possible is very important to installers, our standard DualCom GPRS dual path products are some of the lowest current consuming signalling devices available. DigiPlus® follows this same strategy and its quiescent current consumption will be less than 30mA

0845 and 0870 numbers are now free with BT so where's the benefit?

If your end user is a BT customer with a calling package this is true, however there is still the prospect of 21CN incompatibility. If your customers are not using BT, and 30% of end users do not then they will still pay for each call on these numbers. Many ARCs also use 090x numbers and even where 0844 so called 'low call' numbers are used there is still a 'set up' or connection charge per call which can be anything from 6p per call.

Why doesn't it have a built-in ADSL micro-filter?

Where ADSL Broadband exists on the same line as a Digital Communicator a Broadband filter will already be fitted. We did not want to add to the cost of DigiPlus® when in most cases a filter would already exist or not be required. Where filters are needed CSL already sell a security friendly BABT approved filter (CS0720).

Why not just install a DualCom G2?

As the entire DualCom GradeShift® range utilises the same dialling technology as DigiPlus® ALL DualCom GPRS products are guaranteed to operate over the 21CN telephone system. Our research showed that many customers needed a mid-way priced product. If you wish us to help you campaign your end-users to upgrade them to DualCom GPRS G2 or DigiPlus® please call us.

Why would I want to warn a customer about telephone call costs?

Where end users check their itemised phone bills we would expect that regular calls to 08/09 telephone numbers might already have been challenged, this is perhaps why some installers fund their own 0800 free numbers. We believe that as the economic climate worsens, there will be more scrutiny of telephone bills. Better you tell your customer than a competitor. DigiPlus® offers you and your customer a fixed charge with no uncertainty of uncapped charges.



I have heard that telephone companies may charge connection to 0800 lines is this true?

OFCOM are currently rejecting moves from certain Telephone Service providers (TSPs) to make this happen. Regardless of the TSP, all DigiPlus® free calls are routed via Vodafone to CSL's Gemini network and would not be subject to other providers' terms.

ARCs won't like the portability of my Digs for Volume Transfers?

For many years now Redcare and DualCom systems have been portable. When an installer opts to move from one ARC to another all these systems can be moved without the need for an engineer to visit each individual site. Meanwhile the installers' Digital Communicators have had to wait until the next routine maintenance visit to be re-chipped with the new ARC's details. DigiPlus® can be redirected to a new ARC (subject to the current ARC's approval) without the need for an engineer to visit site, furthermore since many older Digital Communicators use chips that are no longer available, without DigiPlus® a move to a new ARC would require a new Digital Communicator.

Will it fit inside my control panels?

DigiPlus® is designed to fit inside the same housing that contains the current Digital Communicator. Similar in size to a credit card and around 15mm thick the unit will locate inside the vast majority of control panels or remote power supplies.

Will it work with Digital telephone lines i.e. ISDN or extensions from business systems?

DigiPlus® will operate anywhere that an existing Digicom is currently working. Where a '9' pre-fix is required, for example to connect to an exchange line through a PABX system, DigiPlus® will automatically detect and prefix this in the calling pattern.

DigiPlus® is EN Grade 2 standard but what about pre-EN DigiComs will they now poll once per day?

Yes, a free polling call will be made daily to CSL's Gemini network. Where this fails an alarm will be delivered into the ARC. This applies to pre and post EN digicom systems therefore your pre EN digicoms will instantly be polled free of charge giving your end user an additional benefit.

As an ARC I make revenue with my receiver calling numbers, I will lose this with DigiPlus®

Most ARCs use Non-Geographic-Numbers (NGNs), with 087x, some 084x and some 0906 prefixes for various business and commercial reasons. Telephone companies (Telcos) make the largest percentage of any revenues generated with these numbers and the ARCs make a very small amount per call. DigiPlus® takes the revenues earned by the Telco and distributes this to the ARC, Installer, CSL and the end-user. As such, call stream revenue lost by the ARC will be more than compensated for by the margin added to the annual cost of DigiPlus®.

How do alarm signals arrive into the ARC?

Polling and alarm signals are routed from DigiPlus® via CSL's existing Gemini Secure Network. This UK-wide network currently manages polling and alarms for all DualCom GPRS systems. Fixed (kilo stream) and Radio (Packet switched) links also exist into all the UK's ARCs. DigiPlus® will deliver all polling and alarm signals via these existing trusted routes. ARCs will not have any additional cost of either hardware or infrastructure to monitor DigiPlus®. In fact, over time some ARCs can dispense with some of their legacy receiving equipment saving costs on hardware, space and telephone line charges.