

## What is Entel's P1 Private PoC radio system?

P1 is Entel's exciting new Business Critical radio communications system. P1 has evolved as a low –cost, single customer, radio system from Entel's popular E-PoC service. P1 provides outstanding performance, features and range at a cost that is often significantly lower than other types of radio systems. P1 comprises:

#### P1 Server

At the heart of the system is the P1 server that is purchased in place of traditional radio repeater(s). The P1 server can be purchased pre-installed on a DELL PC or installed in Amazon cloud.

#### DN400 Radios

Entel's DN400 P1 radios are virtually identical to our DX400 DMR radios. They provide the same level of ruggedness and environmental protection, are simple to operate, provide outstanding audio quality and volume levels (far better than DMR).

### PC Dispatcher software (optional)

Our comprehensive Dispatcher software provides all the essential features you might expect of a well featured radio system.

#### Advanced all in one desktop Dispatcher

The compact dispatcher solution includes a touchscreen and GPS map and costs less than a basic fixed mobile radio.

#### PC Voice, Data, location & Message Recording software (free option)

P1's built in safety and evidence recording is ideal to monitoring and logging safety of your staff, e.g. parking attendants, social workers etc. This feature can easily be disabled (should you prefer not to record anything at all).

#### Stand-alone Gateway (optional)

Entel's gateways enable you to significantly extend the range of, or migrate from, existing radio systems. Please visit our YouTube channel: https://www.youtube.com/channel/UCiME0y4FVz5YNDInMbFo2VQ/featured

#### **Smartphone App**

The P1 Android and iOS Smartphone app enables Smartphone users to be in touch with P1 radios and, when used with a Gateway, existing Analogue and Digital radio systems.

## How much does P1 cost compared to other types of radio systems?

Cloud P1 server software can support hundreds or thousands of DN400 radios. The software is pre-installed for you and costs less than a single DMR repeater. There are some moderate ongoing fees associated with hosting your server in the cloud (which can be avoided by using a DELL PC server).

A DELL PC based server that can support up-to 500 DN400 radios, costs about the same as a single DMR repeater and aerial system (smaller and larger size P1 DELL PC servers are available). Other than the internet connection (that may already exist) and mains power, there are no ongoing server fees.

The advanced DN400 P1 radio with its lifetime P1 license costs about the same as a mid-tier competitor's DMR radio.

If DN400 radios are only used on WiFi, e.g. on-site only, there are no ongoing fees. If used on cellular, Entel's, high redundancy, 4 UK network plus EU roaming SIM monthly cost is only a little more than a pint of beer. Lower cost single network SIM's can of course be used where budgets are extremely tight.

## What are the main benefits of P1 over other radio systems?

- A single P1 server essentially functions like a large Trunked multi-site, multi base-station radio system but at a fraction of the price
- Only a single P1 server is required to cover all your sites
- Practically no range or channel limitations
- Supports as many simultaneous calls as you have pairs of devices
- No site rental or interconnecting line rental fees to pay
- Significantly less infrastructure equipment to purchase and maintain
- Instantly re-programmable over the air
- Low cost server backup options
- Delivers a far higher degree of redundancy compared to typical repeater systems



## How easy is it to install a P1 radio system?

- Entel has a full server installation guide however we carry out almost all of the installation work for you at no additional cost.
- For a Cloud server you order the correct type and size cloud server from Amazon then Entel will install and pre-configure the server software for you. You only have to program to your customers specific needs e.g. Group aliases, Emergency settings, GPS on or off etc.
- For a DELL server, the server is delivered to you pre-configured as per the cloud server above. In addition to
  programming you will need to plug the server into the mains and its internet connection, far quicker and easier than
  installing a repeater and aerial system!

## What type of organisations will benefit from using Entel's P1 system?

- Anyone requiring national coverage e.g.
  - Highways maintenance / patrols
  - Couriers
  - Transportation etc.
- Anyone requiring extremely cost effective wide-area two-way radio coverage, e.g.
  - Utilities
  - Local authorities
  - Education, University campuses / student accommodation etc.
- For hire applications where you need to deploy a widearea radio system at short notice, e.g.
  - highways maintenance
  - Cycle race
  - Car rally
  - Marathon, etc.

- Anyone needing on-site coverage where the cost of deploying a VHF or UHF radio system would be cost prohibitive. For example sites where WiFi already exists, e.g.
  - Mines / Tunnels
  - Hotel Chains
  - Factories
  - Museums
  - Cruise Ships etc.
- Anyone who wants to expand the range and capabilities of their existing radio system by adding P1.
- Anyone requiring two-way radios that can always make a call, i.e. not limited by the number of channels available
- City users where, due to the built-up area, there is limited VHF / UHF range and very high channel congestion / interference

### How robust is P1 compared to Analogue or Digital radio systems?

- A simplex (back to back) radio system without a repeater is extremely robust as it does not require any infrastructure.
   Unless there are problems with interference, range or the number of simultaneous calls P1 is not best suited for these types of applications. However these systems can be easily integrated into a wide area P1 system to provide improved efficiency and connectivity.
- A single repeater system will stop working if the repeater / aerial system becomes faulty and, if not battery backed, also when mains supply fails. P1 can be configured in a similar way but at a lower cost and with far more capability. However if a single point of failure is unacceptable, P1 can be cost effectively configured with backup server(s).
- A multiple repeater / multi-site system is more robust than a single repeater but is many times more expensive compared to a fully redundant P1 system.
- DN400 radios with Entel SIM's roam all 4 UK cellular networks (plus Europe) providing access to thousands of base stations ensuring a very high degree of redundancy.



## What features does a P1 system have?

#### Voice

- Group and individual calling
- Broadcast / All call\*
- Priority call (call interrupt)
- Talk Group monitor (listen to two or more groups at a time)
- Dynamic group calls
- Contact book
- Voice recording
- Remote microphone live

### Messaging & Data

- Send / receive text messages to / from a terminal\*
- Send text messages to some / group / all terminals\*
- · GPS location data
- Data recording

### **Emergency**

- Emergency / Lone-Worker / Man-Down with highest call priority & transmit interrupt
- Emergency call GPS location
- · Remote mic live

#### General

- Communication with existing radio systems (requires Radio Gateway)
- Remote configuration and programming over the air / IP
- Presence check (see who is on-line)

<sup>\*</sup> Feature in development as of Mar 2021, please check availability with Entel



## How does P1 compare to Entel's E-PoC Service?

Factors	Entel PoC System Type	
Feature	Private P1	E-PoC EMEA
Designed for end users who require their own in-house server	Yes	X
Designed for dealers who want to offer their own full featured PoC service to multiple end-users	X	Yes
Designed for end users who don't want to run and maintain their own server	X	Yes
Up-Front cost compared to a simple on-site DMR Tier II or III repeater system	Lower	Considerably Lower
Up-Front cost compared to wide-area DMR Tier II or III linked repeater system	Considerably Lower	Considerably Lower
On-going costs (private WiFi systems)	None	Very Low
On-going costs (cellular systems)	Very Low	Low
Supports a single Customer server	Yes	X
Supports multiple Customer servers	X	Yes
Advanced PC Dispatcher with Map and Maptools (Geofence etc.)	Х	Optional
PC Dispatcher with Map	Optional	Optional
Android desktop dispatcher	Optional	Optional
Fully automatic remote site backup server	Optional	Yes
Full ongoing software support and maintenance included in cost	Only critical bug fixes	Yes
Smartphone / Tablet compatible	Yes	Yes
Indoor location option	X	Optional
Smartphone / Tablet Lone Worker & Man Down	X	Optional
Supports emergency features	Yes	Yes
Supports a virtually unlimited number of groups per end-user	Yes	Yes
Virtually unlimited number of interference free channels	Yes	Yes
Over The Air (OTA) programming	Yes	Yes
Own PC hardware & Cloud server options	Yes	Х
Server based evidence recorder	Yes (programmable on/off)	Optional
AES256 Encryption	Optional	Yes
Seamless WiFi to Cellular handover	Optional	Yes
Instant deployment without the need to install any infrastructure whatsoever	Х	Yes