



Choosing a SIM card

Your TEC-Angel can only communicate with you through text messages, and requires a mobile phone SIM card with continuous credit. Text messages are charged at your chosen network operator's standard rate plus there is a monthly £3.00 premium rate text message carrying system data¹ to the manufacturer which allows them to check that TEC-Angel continues to operate correctly.

As carer, you have had the option to either purchase a suitable SIM card direct from our website or provide one of your own choosing. Our preferred mobile phone network operator is currently GiffGaff (which runs on the O2 network) although any networks standard SIM should be suitable except THREE (see Mobile Phone Network summary later).

It is ***your absolute responsibility*** as carer to maintain enough credit on the SIM card, and we very strongly recommend using a SIM card which provides an unlimited number of text messages, as well as an `automatic bundle` and credit auto top-up feature. The `automatic bundle` is to refresh your calling package (text allowance) every month, and the credit auto top-up to charge your saved credit card as needed when the credit gets low automatically. Typically these have to be set up online at the website of your network provider of choice (just the once).

Our recommendation may change from time to time and will be reflected in this online "Choosing a SIM card" guide which is more up to date than the version printed in the User Guide. You may care to print this to take to a network operator's high street store to purchase your SIM. The latest online version of this guide is available at <http://tiny.cc/TA-SIM>.

SIM Card Guidelines

- At the time of publication, GiffGaff offer the best tariff for purely text use of a SIM. They offer a £7.50 a month `Goodybag` for unlimited texts or £5 a month one for up to 500 texts. When the TEC-Angel is fine tuned to your loved one's lifestyle, there should be very few messages and the £5 tariff will amply suffice. Initially though we'd recommend the unlimited texts tariff while you experiment and get used to the TEC-Angel. This requires you to go-online and register the GiffGaff SIM, enter a credit card and set an auto-topup (we suggest a maximum £15 once a month), and then select the £7.50 goody bag and set it to auto repeat. You can put credit on a GiffGaff SIM with an O2 voucher (yes O2), BUT you cannot set up a repeating Goodybag unless you have registered a credit card and set a credit auto-topup. Note that if you opt for the £5 Goodybag, and exceed 500 messages, then it will not auto repeat nor can you go online and start another Goodybag (whatever the website says) until the month has expired, and in that intervening period the SIM will be charged 5p off your balance for each text.
- The single most important factor is good mobile phone coverage in the area where the TEC-Angel is to be located. If your mobile phone has good signal strength at your loved one's home but you're not sure about other networks, then you may decide to use the same network as your own mobile phone.



- Text messages are quicker across a single network; texts crossing from O2 to Vodafone for example might be slightly delayed (more noticeable on longer messages). This is a possible reason to use the same network provider as your own mobile phone provider if coverage on your phone is good where the TEC-Angel will be located.
- Only the O2 and Vodafone *networks* (see summary later for details) currently allow TEC-Angel to set itself to the correct time & date, for other *networks* you may have to set the time manually using the `CLOCK` and `DATE` text message.
- The TEC-Angel only sends text messages; it does not make phone calls or use Data. Ignore any 'free minutes' or 'free Megabytes' in the SIM package being offered.
- TEC-Angel requires only 2G coverage. It is unlikely you can purchase a 2G SIM nowadays, but avoid paying extra for any 3G features, and certainly not 4G! Please be aware that the Mobile Network Operator THREE only provides 3G service with no 2G backup, and hence no SIM cards for the THREE network will work in TEC-Angel. This includes the virtual network operator `Tello` which runs on the THREE network.
- The Hub requires a 'standard size' SIM card; not a 'micro' or 'nano' SIM card.
- Some Networks (Vodafone, we're looking at you) require an access code sent from the Network to the SIM before you can log on to the `My Account` for that SIM online. The access code is sent to the SIM *in the TEC-Angel* of course, but provided you have credit left on the SIM then the TEC-Angel will by default forward that message and hence the access code to your phone. **But** if the TEC-Angel SIM is out of credit, you will not receive that forwarded access code to enable you to log onto `My Account` to top-up. If the **Network you choose uses this method** (ask the shop), then ensure there is another non `My Account` method to top up the SIM such as Vodafone offers via "topup.vodafone.co.uk" website (probably intended for parents to top up kids SIM's without access to the kids phones), or via an ATM machine.

Once you have your SIM, store the number in your own phone as with any other contact, maybe giving it a name such as 'TEC-Angel', 'Chez Mum', 'Mrs Rogers' or simply 'Flat 34'. If you have the option, which depends on your phone, you may be able to select a unique message tone for individual contacts. We would suggest a different tone from the usual message tone so even without looking at your phone you can tell if it's a text message from the TEC-Angel. For example, on Apple phones select 'Edit' for the TEC-Angel contact details and change the 'Text tone' to something unique and insistent. Once TEC-Angel is configured correctly you shouldn't hear that message tone very often !

Note 1: System Data sent monthly to the manufacturer includes various technical parameters that allow them to detect if your system is working correctly and may help improve future products. It also contains the following non-technical information that you set into the TEC-Angel: 1) *The TEC-Angel phone number* (i.e. the SIM you bought), 2) *The primary carer's phone number* (probably your number, so we can contact the carer if we detect technical issues with this system), 3) *The subject's name* as set with the NAME command (eg "Mum", "Uncle Bert" or "Mrs Rogers" etc.), and 4) *The property name* as set with the PROPERTY command (e.g. "Flat 34", "13 Richmond Rd" etc.) These last two so we can identify a system to the carer if they manage multiple systems.



Mobile Phone Network Summary

There are actually only *FOUR* networks, these are owned by the Mobile Network Operators (MNO's) O2, Vodafone, EE, and Three. These are the companies that own the cell towers and all the phone network infrastructure that generally is invisible to the users.

These four Mobile Network Operators license other companies to run `virtual networks` on top of their infrastructure, companies like *The Co-op* and surprisingly *Virgin*. So whoever you choose to provide your SIM in reality you only have one of four networks to choose from, but you may choose a `virtual network` licensee to give you a better tariff.

So here are the four MNO's together with the virtual networks licensed by them to use their infrastructure.

Mobile Network Operator	Networks on this Operator	Comments on suitability with TEC-Angel (at date of publication)
O2	GiffGaff	£7.50 / month unlimited texts tariff (or £5 / month 500 texts).
	Lyca Mobile	£10 / month for unlimited texts.
	O2	£10 / month for 1000 texts
	Tesco	£10 / month for 300 texts
Vodafone	Lebara	£10 / month for 62 texts !
	Talk Mobile	£10 / month for 250 texts
	Vodafone	£10 / month for unlimited texts (but online access to `My Account` is a pain).
EE*	Asda	Problems with this virtual network used with TEC-Angel
	Co-op	£10 / month for 3000 texts
	EE	£10 / month for unlimited texts
	TPO	£10 / month for 1000 texts
	Vectone	£10 / month for 52 texts
	Virgin	Problems with this virtual network used with TEC-Angel
	T-Mobile, Orange	No longer available (Bought by EE)
Three*	3	The THREE network provides no 2G backup service so no SIMS on the THREE network will work in a TEC-Angel.
	Tello	

Green: First choice for this network.

Amber: Other choices for this network.

Red: Problems with this service or tariff optimized for voice calls.

Black: Pending testing.

* **EE** does not provide time and date information to the TEC-Angel, and you have to set it (once) using the **CLOCK** and **DATE** commands.

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