

# Choosing a pump

Here are some points to consider when choosing a pump. Please always check all specifications and features on the comparison chart with the manufacturers before making final decisions.

There are 3 main pump companies providing pumps in the UK, **Animas** - Vibe, **Medtronic** - Paradigm Veo & the most up-to-date pump available, released in February 2015, the **Medtronic** MiniMed 640G, **Roche Accu-Chek** - Spirit Combo & Insight. The CellNovo management system, the Dana Diabecare R and MyLife OmniPod are also available in some areas. Today, more than 90% of pumps in use in the UK are compatible with Continuous Glucose Monitoring (CGM) Please note: all pumps may not be available at every pump clinic in the UK.

- Safety features
- Customer service
- Diabetes team preference
- Bolus options
- Ease of use
- Age
- Lifestyle
- Clinical features
- Number of basal programs
- Training and education
- Insulin delivery system
- Look and feel of pump



Medtronic MiniMed 640G



Animas Vibe

# Insulin pumps available in the UK 2016

Watch out for new pumps coming soon

*Pumps are not to scale and for illustrative purposes only*



Medtronic 640G



CellNovo



OmniPod



Accu-Chek Spirit Combo



Animas Vibe



Dana R



Medtronic Veo



Accu-Chek Insight

	Animas Vibe Insulin Pump & CGM System	Medtronic MiniMed 640G & CGM System	Medtronic MiniMed Paradigm Veo 554* & 754**	Accu-Chek Insight	Accu-Chek Spirit Combo	CellNovo	OmniPod
<b>Pump features</b>							
<b>Size cm</b>	8.26 x 5.08 x 2.18	5.3 x 9.6 x 2.44	5.1 x 7.6 x 2.0* 5.1 x 9.1 x 2.0**	8.4 x 5.2 x 1.9	Pump: 8.2 x 5.6 x 2.1 Handset: 9.4 x 5.5 x 2.5	Pump: 52.8 x 35.3 x 14.3 Handset: 111.6 x 66 x 14	PDM 6.4 x 11.4 x 2.5 Pod 3.9 x 5.2 x 1.5
<b>Weight</b>	105g	96g	95g* 102g**	115g all inc	110g all inc	Pump: 32g inc. cartridge Handset: 110g	PDM 125g Pod 25g without insulin
<b>Max capacity units</b>	200	180 or 300	180* 300 **	200 self-filled  160 novorapid prefilled PumpCart	315	150	200
<b>Patch Pump</b>	No	No	No	No	No	Yes	Yes
<b>Basal features</b>							
<b>Basal rates</b>	12	48	48	24	24	20	24
<b>Basal profiles</b>	4	8	3	5	5		7
<b>Min. basal rate units per hour</b>	0.025	0.025 0 to 0.975 0.05 1 to 9.95 0.1 10+	0.025	0.02	0.05	0.05	0.05
<b>Zero basals</b>	Yes	Yes		Yes			No
<b>Bolus features</b>							
<b>Smallest bolus units</b>	0.05	0.025 to 0.05 increments	0.025	0.5	0.1	0.05	0.05
<b>Max bolus</b>	35	75	75	25	25		30
<b>Extended bolus</b>	up to 12hrs	30mins-8hrs	30mins-8hrs	15mins-12hrs	15mins-12hrs	up to 8hrs	% or Units

	<b>Animas Vibe Insulin Pump &amp; CGM System</b>	<b>Medtronic MiniMed 640G System</b>	<b>Medtronic MiniMed Paradigm Veo 554* &amp; 754**</b>	<b>Accu-Chek Insight</b>	<b>Accu-Chek Spirit Combo</b>	<b>CellNovo</b>	<b>OmniPod</b>
<b>Pump durability</b>							
<b>Waterproof</b>	IPX-8 tested at 12ft (3.6m) for 24 hrs	IPX-8 tested at 12ft (3.6m) for 24 hrs	IPX-7 splashproof or accidental immersion	IPX-8 1.3m for 60 min (temp emersion)	IPX-8 2.5m (8ft) for 60 mins (temp immersion)	IPX-8 submersible 1.1m for 1 hr	IPX-8 watertight 25ft for 60 mins
<b>Battery Life</b>	3-4 weeks	2-4 weeks	10 days+	35 days bluetooth off	- 200 days bluetooth off - 80 days bluetooth on		PDM 4 weeks
<b>Additional features</b>							
<b>Glucose meter</b>	No	send BG wirelessly from contour link	send BG wirelessly from contour link	Yes	Yes	Yes	Yes
<b>Handset</b>	No	bolus can be sent wirelessly from contour link	No	Yes	Yes	Yes	Yes
<b>Colour display</b>	Yes	Yes	No	Yes	On Handset	Yes	No
<b>Touch screen</b>	No	No	No	Yes	No	Yes	
<b>Pump colours</b>	Pink, green, silver, blue or black	Blue, smoke, purple, clear and pink	Black with choice of accent colours	Black	no choice	Black - skins available	no choice
<b>Services</b>							
<b>Estimated replacement</b>	24 hours	6 hours	6 hours	24 hours	24 hours		24 hours
<b>Warranty</b>	4 years	4 years	4 years	4 years	4 years	4 years	Lifetime
<b>Loan pump</b>	Yes	for travel outside of mainland Europe	Yes				



# Insulin pumps compatible with integrated Continuous Glucose Monitoring

Some clinics will provide a CGM enabled pump as a system with NHS funding, however at present it is more common to self fund CGM as an added extra if you want to use it in conjunction with your pump.



## Medtronic MiniMed 640G System

This is the most popular and advanced insulin pump available at this time (July 2016) It provides optional use with integrated Continuous Glucose Monitoring (CGM) using the Enlite 2 sensor. Based on your sensor glucose values, SmartGuard® can predict when approaching low glucose levels 30 minutes in advance and automatically stop insulin delivery. When blood glucose levels recover, SmartGuard automatically resumes basal insulin delivery

- Downloads to CareLink™



## Medtronic MiniMed Paradigm Veo 554\* & 754\*\*

Alerts you when glucose levels are rapidly rising or falling, your reaction to this can help avoid hypo - or hyperglycaemic excursions. Trend Arrows - Reveal how fast and in which direction glucose has moved over the past 20 minutes. Low Glucose Suspend - Automatically suspends insulin infusion if glucose levels fall below a specified limit. Aimsat preventing potentially severe hypoglycaemic excursions

- Downloads to CareLink™



## Animas Vibe® Insulin Pump & CGM System

This CGM-enabled pump means you have the option to receive glucose readings every 5 minutes and the data can be viewed and analysed on the pump's colour display. Integrated Continuous Glucose monitoring using the Dexcom G4® PLATINUM Sensor is approved to wear for up to 7 days (but can normally be extended) This CGM has customisable high and low alerts and a built-in hypo safety alert (set at 3.1 mmol/L)

- Downloads to Diasend

# Further Information

Accu-Chek Combo or Insight - 0800 731 229

Animas Vibe - 0800 055 660

CellNovo - 0203 058 1250

Medtronic Veo or 640G - 01923 205167

mylife OmniPod - 0844 8567820

Dana R - 01926 494222

*(Dana R not in comparison chart)*



Medtronic 640G

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For impartial information and advice on insulin pump therapy visit:

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[www.childrenwithdiabetesuk.org](http://www.childrenwithdiabetesuk.org)

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