Medtronic

MiniMed® 640G System^

An introduction to Insulin Pump Therapy

it thinks

it thinks

- ABOUT YOUR PROTECTION
- ABOUT YOUR DAY

Our most advanced breakthrough in glucose control

You think a lot about controlling your glucose levels, but it's challenging because your levels can be affected by diet, stress and exercise. What if you had a system that could give you better control? What if you had a system that could think?

The MiniMed® 640G features innovative technology that thinks about your diabetes and helps you achieve better glucose control.[†]

By switching to a MiniMed® 640G Insulin Pump System^, you replace the need for multiple daily injections, and can have better control over your glucose levels. This makes it easier to do things like eating out, sleeping in on weekends, playing sports and travelling abroad for trips or holidays, without having to plan.

Reduce injections to one every three days*

An insulin pump can help achieve better glucose control than multiple daily injections[1]. The MiniMed® 640G insulin pump delivers fast-acting insulin 24 hours a day. It does this by using a needle to introduce an infusion set, a short soft tube (called a cannula) that sits comfortably under the skin.

1

One needle every three days instead of 12*

Using an insulin pump you only need to change the infusion set once every three days.

Eat when you want

Food and carb counting play a central role in diabetes management. With daily schedules being so variable, managing insulin requirements at meal times can be difficult. When using multiple daily injections it can be even harder to manage those unexpected changes, such as delayed or skipped meals and diverse diets.

With an insulin pump, food management can be easier

Are there times when you fancy a snack? The built in Bolus Wizard™ calculator feature helps to ensure you are getting precisely the right amount of insulin (in increments as small as 0.025 units) by taking into account three key pieces of information to determine the right dose.

1. The insulin already in your system
2. Your current glucose levels (using the linked CONTOUR® NEXT LINK 2.4 from Bayer blood glucose meter)
3. Carbohydrate intake and personal insulin settings

With the touch of a few buttons you can adjust your insulin dose, allowing you to snack without needing additional injections.

"With the pump, Shiloh can have the flexibility to eat when she wants to eat."

Gareth and Kimberly, with Shiloh, recently diagnosed

Gain the freedom to be active

> "I feel that an insulin pump will help people improve and manage their Type 1 diabetes, whether you're someone who walks every morning… right through to professional athletes."
>
> ***Jason***
> ***In better control with his pump since 2010***

Like to exercise whenever you want and not have to carb load or worry about hypos? Whether you're an amateur or an elite athlete, a MiniMed® 640G insulin pump can help take the worry and hassle out of physical activity. It gives you more flexibility and control so that you can exercise when you want.

Better control at your fingertips

Unlike multiple daily injections, the MiniMed® 640G insulin pump can be adjusted instantly and conveniently. With the touch of a few buttons you can match the rate of insulin needed for your activity. This can help reduce the risk of low glucose levels (hypoglycaemia) during and after exercise.

Small and discreet

Your MiniMed® 640G is smaller than a mobile phone and can be worn almost anywhere, on your belt, or conveniently tucked away inside your pocket or bra. Medtronic also offers accessories including belt clips, pouches, silicone cases and a choice of customised covers to suit your taste.

Flexibility

When you want to swim, play contact sports, bathe, or get close and intimate, you have the freedom to easily and safely disconnect the pump[#].

Switch On - smart technology that thinks about your glucose

Medtronic gives you an integrated approach to achieve better control. The goal of insulin pump therapy is to mimic the role of the pancreas and keep blood glucose levels as close to normal as possible.

Reduce the risk of long-term complications

Studies[1,5] have shown that insulin pump therapy can achieve better glucose control and reduce the number of hypoglycaemic episodes versus multiple daily injections.

Hypoglycaemic episodes: Reduced up to 84%.[6]

In addition, insulin pump therapy can help you reduce the risk of many long-term complications[1] like:

- Cardiovascular damage: **Reduced up to 41%**
- Nerve damage (neuropathy): **Reduced up to 60%**
- Kidney damage: **Reduced up to 54%**
- Eye damage (retinopathy): **Reduced up to 63%**

Switch On - a system designed with you in mind

Advanced Protection

Our exclusive SmartGuard™ technology is a breakthrough in diabetes control.

The latest advancement of SmartGuard™ mimics some of the functions of a healthy pancreas by automatically stopping insulin delivery when your sensor glucose is predicted to approach a low limit - and resuming delivery when your levels recover.[7]

Dynamically stopping insulin delivery has been shown **to reduce** the length of low glucose levels, as well as the number of nocturnal hypoglycaemic events.[8,9]

93 percent of those who used a suspend feature in their pump **felt more secure** managing their diabetes.[10]

98% 98 percent of hypoglycaemic events were **detected** by the Enlite™ sensor.[†,11]

An integrated insulin pump and CGM system **lowers** your HbA1c without increasing your risk of going low.[12,13]

Greater Convenience

MiniMed® 640G helps you closely match your insulin needs to your daily routine. You can set friendly reminders or personalised bolus doses and basal patterns. Also, the simple home screen and menu layout minimise steps needed to manage your diabetes, so you can focus more on your day.

- Remote bolus
- Wireless connection to pump
- Medtronic Carelink® Software

Improved Design

The bold, new design of the MiniMed® 640G was inspired by years of feedback from people like you, who want their technology to be smart and easy to use.

- Waterproof for up to 3.6 metres for up to 24 hours (ipx8)[14]
- Full-colour, auto-brightness display
- Intuitive screen navigation and escape button
- Ergonomic design for right- and left-handed users

Get the full picture with Continuous Glucose Monitoring (CGM)

How does it work?

A small Guardian™ 2 Link transmitter attaches to the sensor and wirelessly transmits glucose data to your pump. This information is updated every five minutes. The advantage is that you can see what your current glucose level is, as well as enabling your pump to alarm you when you are likely to have a low or a high, day or night. Even if you sleep through the alarms, the pump will automatically suspend insulin delivery if you are predicted to reach your pre-set low levels, via our SmartGuard™ Technology.^

CGM works with fingerstick testing to guide insulin adjustments. Although fingersticks are still necessary for calibration with blood glucose, the CGM sensor will provide you with up to 288 readings a day (every 5 minutes), giving you real-time information. The small glucose sensor is worn under the skin and measures your interstitial glucose (glucose between the body's cells). This sensor is disposable and can be worn for up to six days.

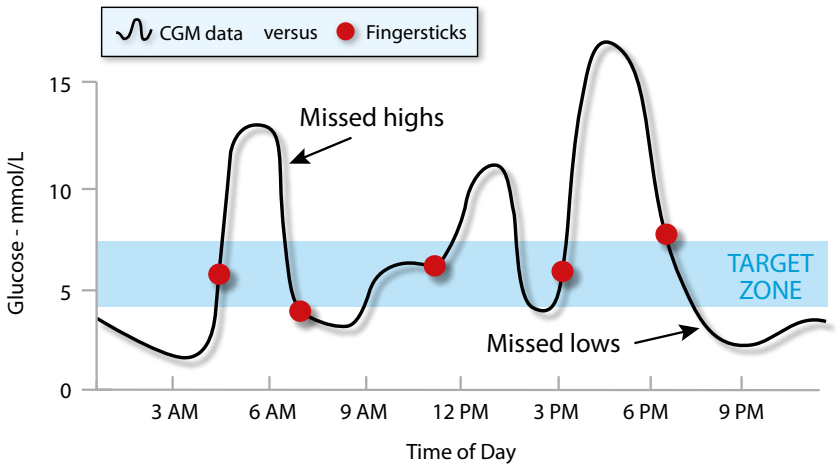


Illustration purposes only

Compact and comfortable

Your CGM sensor can be worn day or night and you can leave it on to shower, play contact sport, swim, or go out to dinner. The slim design enables the sensor to be worn comfortably and discreetly.

You can stay informed about your glucose levels and can take corrective action if needed. These results can be made available to your health care team, via our unique Medtronic CareLink® software to assist with making therapy adjustments.

Advanced protection - your pump will look after you when you need it most

Introducing SmartGuard™

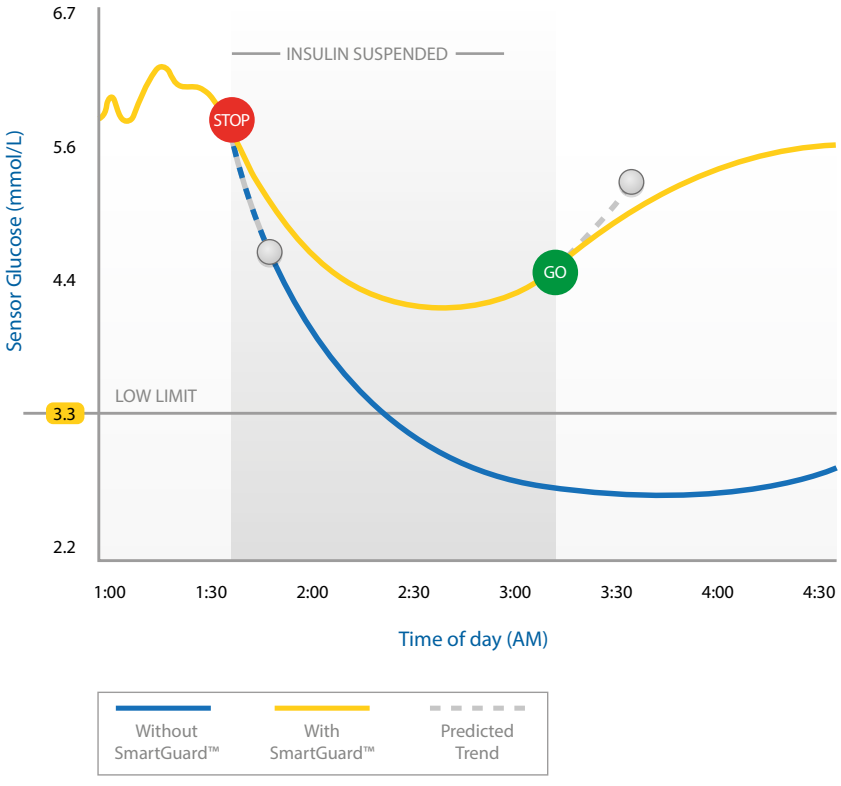
Do you worry about lows when you're sleeping? We realise that low levels of blood glucose (hypoglycaemia) can be more difficult to recognise during sleep, and that your insulin needs may fluctuate over the course of 24 hours.

Our exclusive SmartGuard™ technology is available only with the MiniMed® 640G System^. This feature mimics some of the functions of a healthy pancreas by automatically stopping insulin delivery when your sensor glucose is predicted to approach a low limit – and resuming delivery when your levels recover.[7]

The MiniMed® 640G is the only available pump in the world with SmartGuard™, a predictive Low Glucose Suspend safety feature (when used in conjunction with CGM^) and can give you the confidence and freedom to sleep soundly at night.

How **SmartGuard™** works in the MiniMed® 640G

(for illustration purposes only)



Greater convenience with an integrated system

CONTOUR® NEXT LINK 2.4 from Bayer is the only available meter that links with the MiniMed® 640G System.^

it links To help protect you

Innovative technology provides accuracy you can count on.

The CONTOUR® NEXT LINK 2.4 meter uses the CONTOUR® NEXT test strip, the newest strip technology from Bayer, for accuracy and performance. Its innovative features work seamlessly with MiniMed® 640G.

CONTOUR® NEXT TEST STRIPS
Gives you confidence in your blood glucose readings with the most advanced and accurate test strip technology available from Bayer.

NO CODING™ TECHNOLOGY
Removes the need to manually code the meter before testing, eliminating miscoding errors.

MULTIPULSE™ ACCURACY TECHNOLOGY
Ensures accurate readings, even when blood glucose levels are low.[2] Accuracy is not affected by many common interfering substances and medications[16].

SECOND-CHANCE SAMPLING
Tells you when to apply more blood if necessary, preventing you from wasting a strip.

it syncs To help you with your day

Convenient features make better control even easier.

The CONTOUR® NEXT LINK 2.4 meter wirelessly connects to your MiniMed® 640G and provides added convenience to your day.

it's small and stylish

- Easy-to-read colour display
- Rechargeable battery
- Easy to use and carry
- Illuminated strip port

DISCREET REMOTE BOLUSING

Enables the meter to send quick and discrete bolus to your pump

AUTOMATIC TRANSFER TO THE BOLUS WIZARD™ CALCULATOR

The CONTOUR® NEXT LINK 2.4 meter automatically sends blood glucose readings to your insulin pump's Bolus Wizard™ calculator for easier dosing. The Bolus Wizard™ feature calculates and recommends correct insulin doses[17] automatically, so you can manage your insulin more conveniently and precisely. It can help reduce the risk of data entry mistakes.

Medtronic CareLink® Personal Software

Our three-step approach to diabetes management is fully integrated. Your Medtronic pump will wirelessly connect to your Bayer CONTOUR® NEXT LINK 2.4 blood glucose meter and Continuous Glucose Monitoring, meaning all data is stored conveniently on your pump. With one simple upload, you and your healthcare team can make adjustments to your therapy in person, or remotely.

- Have greater control by understanding the effects of insulin, carbs and exercise on your glucose levels.
- Work more productively with your healthcare professional by sharing detailed reports and making therapy and lifestyle changes.
- Get the full picture with CGM data by revealing more low or high glucose patterns than fingerstick testing alone.

Uncovering patterns and trends to maximise therapy

Understanding the effects of insulin dosage, meals, exercise and medication on glucose levels plays an important part in helping to improve diabetes control. Seeing these relationships in chart, graph and table formats allows you to better identify patterns and problems that will help you and your healthcare professional figure out the root cause of your low and high blood glucose levels. Maximise your therapy with Medtronic CareLink® Personal Software.

Improved design

Diabetes is already complicated. Your system shouldn't be. There's a lot to think about to maintain daily glucose control. The MiniMed® 640G System^ thinks about how to make your day easier, with improved design based around years of feedback.

Full colour auto-brightness display

The MiniMed® 640G System^ is our first insulin pump with a full colour screen, so it's easier to see all of your settings at a glance. The large screen automatically adjusts to the surrounding light, so that day or night, in any conditions, you'll always have a clear view. It's also durable and scratch-resistant.

Waterproof up to 3.6 metres for up to 24 hours

When you're out and about with your MiniMed® 640G insulin pump, it's good to know you needn't worry about a few splashes around the pool or a shower of rain, thanks to its IPX8 waterproof rating.[14] And if you like to raise a bit of sweat when you're exercising, your 640G just goes with the flow.

What does insulin therapy cost?

If you have private health insurance covering insulin pumps, you will generally be eligible for full reimbursement of the insulin pump by your health fund, provided you have served your waiting period. A Medtronic Diabetes Therapy Consultant can help you navigate this process.

Contact us on 1800 777 808 or speak with your health fund provider.

What are the ongoing costs?

Medtronic infusion sets and reservoirs are available from the NDSS through Diabetes Australia for $25 - $30 per month.

There are criteria that you must meet to be eligible for insulin pump consumables through NDSS. An NDSS online registration form also needs to be completed and signed by your Endocrinologist or Credentialed Diabetes Educator before being sent to Diabetes Australia.

Your healthcare team should advise you of the appropriate infusion set and reservoir for your pump, so that you can order insulin pump consumables through your state Diabetes Australia office.

Bridging the gap

If you're in the interim 'waiting period' for private health cover benefits and would like to commence insulin pump therapy now, you may be eligible for Medtronic's Bridging the Gap loan pump program.

To be eligible, you must:

- Have private health insurance policy covering insulin pumps
- Be diagnosed with Type 1 diabetes
- Meet the National Diabetes Support Scheme (NDSS) criteria for insulin pump consumables (ndss.com.au)
- Be under the supervision of a health care professional for pump therapy, eg. Endocrinologist or Paediatrician
- Agree to upgrade to a Medtronic insulin pump, once the waiting period has been served

For further information on this program consult your diabetes educator or contact Medtronic.

Why Medtronic?

With over 30 years' experience creating revolutionary products, Medtronic is the leader in diabetes management technology.

See why 7 out of 10~ people choose Medtronic.

Customer Service

- Medtronic offers 24/7 support to help you with your diabetes management. As you commence your journey with insulin pump therapy, Medtronic will proudly partner you in better control. Our support services have been designed to provide you with the highest level of customer service, including:
  - access to Medtronic Clinical Specialists
  - access to Certified Pump Trainers
  - dedicated 24 hour global help line
  - diabetes therapy consultants
  - travel loan program.

Technology

- Medtronic provides the first available integrated system to help you better control your diabetes simply and effectively. Our truly integrated diabetes management system includes an insulin pump, CONTOUR® NEXT LINK 2.4 blood glucose meter, CGM and complimentary Medtronic CareLink® Personal therapy management software. Clinical trials have demonstrated that each component in the Medtronic integrated system can help lower HbA1c[5,18,19]
- The MiniMed® 640G System^ is the only available product listed on the Prostheses List with SmartGuard™ Technology[**]
- We're the pioneer and leader in providing continuous glucose monitoring systems with more than 7 million sensors sold worldwide
- Globally Medtronic Diabetes invests over $100 million per year in research and development to help advance the goal of making an artificial pancreas a reality.

Education and Training

- We are committed to providing you with the latest information and education. Both personally through our information events and education sessions, and online – our clinical support staff are dedicated to helping you get the most out of your pump
- Online training materials available at medtronic-diabetes.com.au
- Access to our Certified Pump Trainers.

We're here to help

At Medtronic, we're here for you at every stage of your journey with your MiniMed® 640G insulin pump. From your very first appointment, through training and ongoing support, we consult closely with you to make sure you can adapt to the pump as quickly and easily as possible. It's easy to get technical support if you need it and if you ever have any questions, we're just a phone call away.

Join our Facebook community

Like us and share stories, hints and experiences with other people who have Type 1 diabetes. We'll keep you up to date with news, events and inspiring ideas in a positive supportive community.

facebook.com/MedtronicDiabetesAUS

Safety information

Medtronic Insulin Pump Therapy and Medtronic MiniMed® Insulin Infusion Pumps

Patients should always discuss the benefits and potential risks with a clinician. Please review the product's technical manual prior to use for detailed instructions and disclosure. **Indications for use** The insulin pump is indicated for the continuous delivery of insulin, at set and variable rates, for the management of diabetes mellitus in persons requiring insulin. **Contraindications** Insulin pump therapy is not recommended for people who are unwilling or unable to perform a minimum of four blood glucose tests per day and to maintain contact with their healthcare professional. While features exist to help facilitate pump usage, Medtronic does not recommend the use of this product by individuals whose impaired vision or hearing does not allow full recognition of the pump signals and alarms.

Patient testimonials relate an account of an individual's response to the treatment. The account is genuine, typical and documented. However, the individual's response does not provide any indication, guide, warranty or guarantee as to the response other persons may have to the treatment. The response other persons have to the treatment could be different. Responses to the treatment discussed can and do vary and are specific to the individual patient.

Always seek advice from your medical practitioner to determine your suitability for insulin pump therapy and CGM. Use as directed.

Reference

^ Components sold separately. † "Thinks" refers to the data retrieval, processing and computing capabilities found in the MiniMed® 640G insulin pump, Continuous Glucose Monitoring system (Guardian™ 2 Link transmitter and Enlite™ sensor) Contour Next LINK 2.4 blood glucose meter and Medtronic CareLink® therapy management software, both collectively and individually. This system and its computing capabilities are part of, but not replacement for, your daily diabetes management. A confirmatory fingerstick is still required prior to making adjustments to diabetes therapy. * Based on the recommended insulin pump infusion set change every 2-3 days compared to 4 injections a day for 30 days. #MiniMed® 640G System^ user guide. ** The Prostheses List outlines the products for which private health insurers are required to pay a benefit, including the agreed benefit payable. The Prostheses List Advisory Committee provides advice to the Minister for Health and Ageing about prostheses that should be included on the Prostheses List and the appropriate benefits for them based on the recommendation of independent clinical experts. ~ Based on total number of pump consumables sold nationally, NDSS sales data 2011. **1.** The Diabetes Control and Complications Trial (DCCT) Research Group. The effect of intensive treatment of diabetes on the development and progression of long-term complications in insulin-dependent diabetes mellitus. NEJM. 1993;329(14):977-986. **2.** Section 7 clinical study. Data on File. Bayer Healthcare, LLC. **3.** MiniMed® 640G with Enlite™ sensor has a MARD of 14.2 percent [Enlite™ Sensor Performance Report] when calibrated 3-4 times daily. **4.** U.S. Enlite Clinical Study Customer Satisfaction Survey. Data on File. Medtronic MiniMed, Inc., Northridge, CA. **5.** Pickup JC, Sutton AJ. Severe hypoglycaemia and glycaemic control in type 1 diabetes: metaanalysis of multiple daily insulin injections compared with continuous subcutaneous insulin infusion. Diabet Med. 2008;25:765-774. **6.** Bode BW, Steed RD, Davidson PC. Reduction in severe hypoglycemia with long-term continuous subcutaneous insulin infusion in Type 1 diabetes. Diabetes Care.1996;19:324-327 **7.** The dynamic suspend feature is based on certain criteria: sensor glucose must be within 3.9 mmol/L above the low limit and predicted to be 1.1 mmol/L or less above the low limit within 30 minutes AND the pump must not be in the refractory period. The dynamic resume feature is based on certain preset criteria: sensor glucose must be at least 1.1 mmol/L above the preset low limit and predicted to be greater than 2.2mmol/L above within 30 minutes AND insulin must have been suspended for at least 30 minutes. **8.** Garg S, et al. Reduction in duration of hypoglycemia by automatic suspension of insulin delivery: the in-clinic ASPIRE study. Diab Tech Ther. 2012;14(3):205-209. **9.** Agrawal P, et al. Usage and effectiveness of the Low Glucose Suspend feature of the MiniMed® Paradigm™ Veo™ Insulin Pump. Diab Sci Tech. 2011;5:1137-1141. **10.** User Evaluations. Data on File, Medtronic MiniMed, Inc., Northridge, CA. **11.** Enlite™ Sensor Performance Report. Data on file. Northridge, CA. **12.** Compared to multiple daily injections, according to the STAR 3 clinical study: Bergenstal RM, et al. Effectiveness of sensor-augmented insulin-pump therapy in type 1 diabetes. NEJM. 2010;363:311–320. **13.** Battelino T, et al. The use and efficacy of Continuous Glucose Monitoring in type 1 diabetes treated with insulin pump therapy: a randomized controlled trial. Diabetologia. 2012;55:3155-3162. **14.** Waterproof at time of manufacture up to 3.6 metres for up to 24 hours at a time. See MiniMed® 640G User Guide for a complete description of the waterproof capabilities and proper use instructions. **15.** Compared to MiniMed® Paradigm™ Veo™ System. **16.** See CONTOUR® NEXT LINK 2.4 package insert for list of substances and medications. **17.** Calculation is based on the amount of insulin currently in the body, the amount of carbohydrates, the user's current and target blood sugar levels, their insulin-to-carb ratio and their body's sensitivity to insulin. Proper Bolus Wizard™ setup must be completed first. Users must input the number of carbohydrates they are eating and their current blood glucose value before the Bolus Wizard™ can calculate the insulin users should take. **18.** Deiss D, Bolinder J, Riveline JP et al. Improved glycemic control in poorly controlled patients with type 1 diabetes using real-time Continuous Glucose Monitoring. Diabetes Care 2006, December; 29(12):2730-2. **19.** Corriveau EA, et al. Effect of Carelink, an internet-based insulin pump monitoring system, on glycemic control in rural and urban children with type 1 diabetes mellitus. Ped Diab. 2008;9(Part ii):360-366.

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For more information or to talk to
a consultant, **call 1800 777 808.**
Visit **medtronic-diabetes.com.au**

Other ways to connect with us

Email: australia.diabetes@medtronic.com
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with SmartGuard™