



# INSULIN PUMPS

COMPANY/ PRODUCT	SIZE AND WEIGHT	BATTERY	RESERVOIR	INFUSION SET	BASAL RANGE	BOLUS RANGE	DETAILS
<b>INSULET CORP.</b> <b>Omnipod</b> 	<b>POD:</b> 1.53 x 2.05 x 0.57 in. 0.88 oz. with empty reservoir  <b>PERSONAL DIABETES MANAGER (PDM):</b> 2.4 x 4.4 x 0.98 in. 4.4 oz. with batteries	<b>POD:</b> battery integrated  <b>PDM:</b> 2 AAA	200-unit reservoir built into pod.	Does not use tubing. Pod comes with a built-in cannula that inserts with a button press on the PDM.	From 0.05 to 30 units per hour in 0.05-unit increments	From 0.05 to 30 units. Increments of 0.05, 0.1, 0.5, or 1 unit. Insulin-to-carb ratio in whole units only.	No tubing. The system includes a waterproof pod that is worn for up to 72 hours and a remote Personal Diabetes Manager (PDM) that controls the pod's functions and has a built-in blood glucose meter. Once the pod is activated, it is required to be within 5 feet of the PDM to deliver bolus doses. The pod delivers basal insulin regardless of how close it is to the PDM. The PDM contains more than 1,000 common foods (with nutrition information) and stores up to 36 preset carb values. Pod is waterproof for up to 25 feet deep for 60 minutes, so there's no need to disconnect while swimming or bathing. Works with Glooko, Tidepool, and Diasend data-management systems. Approved for use by adults and children.
<b>MEDTRONIC DIABETES</b> <b>MiniMed 530G System</b> 	3.7 x 2 x 0.82 in.  3.7 oz. with battery and full reservoir	1 AAA	300-unit reservoir	Compatible with Medtronic infusion sets only	From 0.025 to 35 units per hour in 0.025-unit increments for up to 0.975 units. Increments of 0.05 units for between 1 and 9.95 units. Increments of 0.1 units for 10 units or more.	From 0.025 to 25 units. Increments of 0.1 units. Alternate bolus increments available for greater precision. Insulin-to-carb ratio allows for fractions of grams.	The MiniMed 530G combo pump-CGM uses SmartGuard technology to stop insulin delivery for up to 2 hours if the glucose level reaches a preset low limit and the user doesn't react to a low-glucose alarm. (For more on its CGM functions, flip to p. 72.) Remove pump body before bathing, swimming, and doing other water activities. Works with Glooko and Tidepool data-management systems, plus CareLink Personal software, which is compatible with Windows and Mac operating systems. Approved for use by adults and children 16 and over.
<b>MEDTRONIC DIABETES</b> <b>MiniMed 630G System</b> 	2.1 x 3.78 x 0.96 in.  3.7 oz. without battery and with empty reservoir	1 AA	300-unit reservoir	Compatible with Medtronic infusion sets only	From 0.025 to 35 units per hour in 0.025-unit increments for up to 0.975 units. Increments of 0.05 units for between 1 and 9.95 units. Increments of 0.1 units for 10 units or more.	From 0.025 to 25 units. Increments of 0.025 units. Insulin-to-carb ratio allows for fractions of grams.	The MiniMed 630G combo pump-CGM uses SmartGuard technology to stop insulin delivery for up to 2 hours if the glucose level reaches a preset low limit and the user doesn't react to a low-glucose alarm. (For more on its CGM functions, flip to p. 74.) Pump is waterproof for 12 feet deep for up to 24 hours, has remote bolus functionality via the Contour Next Link 2.4 meter, and features a full-color screen. Works with CareLink Personal software (compatible with Windows and Mac operating systems) to upload and manage pump and CGM data. Approved for use by adults and children 16 and over.
<b>MEDTRONIC DIABETES</b> <b>MiniMed 670G System</b> 	2.1 x 3.78 x 0.96 in.  3.7 oz. without battery and with empty reservoir	1 AA	300-unit reservoir	Compatible with Medtronic infusion sets only	From 0.025 to 35 units per hour in 0.025-unit increments for up to 0.975 units. Increments of 0.05 units for between 1 and 9.95 units. Increments of 0.1 units for 10 units or more.	From 0.025 to 25 units. Increments of 0.025, 0.05, and 0.1 units. Insulin-to-carb ratio allows for fractions of grams.	The MiniMed 670G, a hybrid closed-loop pump, uses SmartGuard technology to allow users to choose from increasing levels of automation that best fit their diabetes management needs. (For more on its CGM functions, flip to p. 74.) The Auto Mode feature automatically adjusts basal insulin delivery based on the user's CGM sensor glucose readings and recent insulin delivery, though it still requires users to, among other things, enter carb grams and confirm mealtime and correction bolus recommendations. Pump uses SmartGuard technology to stop insulin delivery for up to 2 hours if the glucose level reaches a preset low limit and the user doesn't react to a low-glucose alarm. Pump is waterproof for 12 feet deep for up to 24 hours and features a full-color screen. Works with Contour Next Link 2.4 meter to transfer blood glucose readings and bolus remotely. Works with CareLink Personal software (compatible with Windows and Mac operating systems) to upload and manage pump and CGM data. Approved for use by adults and children 14 and over with type 1 diabetes.

COMPANY/ PRODUCT	SIZE AND WEIGHT	BATTERY	RESERVOIR	INFUSION SET	BASAL RANGE	BOLUS RANGE	DETAILS
<b>MEDTRONIC DIABETES</b> MiniMed Paradigm Revel 	3.7 x 2 x 0.84 in.  3.5 oz. with battery and full reservoir	1 AAA	300-unit reservoir	Compatible with Medtronic infusion sets only	From 0.025 to 35 units per hour in 0.025-unit increments for up to 0.975 units. Increments of 0.05 units for between 1 and 9.95 units. Increments of 0.1 units for 10 units or more.	From 0.025 to 25 units. Increments of 0.1 units. Alternate bolus increments available for greater precision. Insulin-to-carb ratio allows for fractions of grams.	The MiniMed Paradigm Revel is a stand-alone pump with optional CGM capabilities. Available in colors, and "skins" are available to customize. Pump is not water-tight; remove before bathing, swimming, or other water activities. Works with Glooko and Tidepool data-management systems, plus CareLink Personal software, which is compatible with Windows and Mac operating systems. Pump also works with MiniMed Connect, which allows data to be displayed via Apple or Android smart devices. MiniMed Connect can text updates to family and friends. Approved for use by adults and children 16 and over.
<b>SOOIL DEVELOPMENT</b> Dana Diabecare IIS 	2.95 x 1.77 x 0.74 in.  2.15 oz. with battery and full reservoir	(1) 3.6-volt DC lithium	300-unit cartridge	Compatible with Sooil infusion sets only	From 0.04 to 16 units per hour in 0.01- or 0.1-unit increments	From 0.1 to 80 units in 0.1-, 0.5-, or 1-unit increments. Insulin-to-carb ratio in whole units only.	Menu uses icons instead of words. Available in five colors. Pump is waterproof at 3.3 feet deep for 1 hour. Does not work with data-management software. Approved for use by adults and children ages 7 and over.
<b>TANDEM DIABETES CARE</b> T:flex Pump 	3.13 x 2 x 0.84 in. with insulin cartridge  4.05 oz. with battery and full reservoir	Rechargeable lithium polymer battery	480-unit cartridge	Compatible with Tandem infusion sets only	From 0.5 to 15 units per hour in 0.001-unit increments	From 0.05 to 60 units in 0.01-unit increments. Insulin-to-carb ratio allows for fractions of grams.	Largest-capacity insulin pump, designed for people who require more than 100 units of insulin per day. Color touch screen. Rechargeable battery with micro USB. Pump is watertight for up to 3 feet deep for 30 minutes. Works with T:Connect Diabetes Management Application, Tandem's web-based software. Also works with Glooko, Tidepool, and Diasend data-management systems. Approved for use by adults and children 12 and over.
<b>TANDEM DIABETES CARE</b> T:slim X2 Pump 	3.13 x 2 x 0.6 in.  3.95 oz. with battery and full reservoir	Rechargeable lithium polymer battery	300-unit cartridge	Compatible with Tandem infusion sets only	From 0.1 to 15 units per hour in 0.001-unit increments	From 0.05 to 25 units in 0.01-unit increments with an option for up to an additional 25 units. Insulin-to-carb ratio allows for fractions of grams.	The T:slim X2 uses the Tandem Device Updater to remotely update software from a computer—without requiring purchase of a new device. Integrated with Dexcom's G5 CGM. (For more on its CGM functions, flip to p. 74.) Color touch screen. Flat reservoir design and micro-delivery technology allow for a thinner pump. Pump is watertight for up to 3 feet deep for 30 minutes. Works with T:connect Diabetes Management Application, Tandem's web-based software. Also works with Glooko, Tidepool, and Diasend data-management systems. Approved for use by adults and children 6 and over.

## Type 2 Patch Pump



If you'd like to avoid multiple daily injections but don't need the bells and whistles of an insulin pump, consider the lower-tech V-Go. Valeritas' device—created for people with type 2 diabetes—sticks to the body and delivers a continuous stream of insulin for 24 hours; mealtime insulin is available with the press of two buttons.

**SIZE AND WEIGHT:** 2.4 x 1.3 x 0.5 in.; 0.7 to 1.8 oz. filled, depending on units of insulin used

**RESERVOIR:** V-Go 20: 56 units total (20 units basal over 24 hours; up to 36 units bolus in 2-unit increments); V-Go 30: 66 units total (30 units basal over 24 hours; up to 36 units bolus in 2-unit increments); V-Go 40: 76 units total (40 units basal over 24 hours; up to 36 units bolus in 2-unit increments)

**INFUSION SET:** Does not use tubing. Comes with a built-in 30-gauge, 4.6-millimeter stainless-steel needle with a 90-degree insertion angle. Needle retracts into the device after use to prevent sharps injury.

**BATTERY:** No battery; uses mechanical power source

**DETAILS:** Specifically designed for use by adults with type 2 diabetes. Unlike other devices, the V-Go delivers bolus insulin with button presses, not electronics. Each disposable device is used for 24 hours, after which time users attach a new V-Go. Device may be submerged to a depth of 3 feet, 3 inches, for 24 hours, so there's no need to remove the patch while swimming or bathing. Does not work with data-management software and doesn't connect with any meters or continuous glucose monitors (CGMs).