



# Continuous Glucose Monitoring

INITIATION SETTINGS FOR THE MiniMed® 640G SYSTEM<sup>^</sup>



« it thinks »

This document will provide guidance as to recommendations for the initial settings for the MiniMed® 640G System with SmartGuard™.

## LOW SETTINGS

These settings are intended to provide warning for the patient when the sensor detects actual or impending hypoglycaemia. By using the SmartGuard™ suspend by sensor features, insulin can be automatically suspended and resumed based on the set low limit. Initial settings are intended to balance safety while minimising unnecessary alerts. Settings are individualised in all cases.

### 1 Determine Time Segments

- Up to 8 time segments can be set for 24 hour period
- Different low settings can be selected for each time segment

#### Considerations

- Define segments for day and night
- Consider segments for regularly occurring activity

### 2 Determine Low Limit for each time segment

- Can be set between 2.8 - 5 mmol/L in increments of 0.2

#### Considerations

- Start at 3.2 mmol/L during day
- Increase for history of hypoglycaemia or hypoglycaemia awareness
- Increase by ~10% for night time
- Decrease in pregnancy when tighter control is desired

### 3 Determine SmartGuard™ Suspend by Sensor option

#### Option 1: Suspend before Low\*

Stops insulin delivery when sensor glucose is predicted to be approaching the low limit in 30 minutes

#### Option 2: Suspend on Low

Stops insulin delivery when sensor glucose reaches or falls below the low limit

#### Option 3: No suspend by sensor

Alert only options used

When Suspend by sensor options are used, insulin delivery will automatically resume when SG is above the low limit and trending upward.\*\*

#### Considerations

- Use Suspend before low during the day and night to minimise patient burden and best prevent hypoglycaemia
- May prefer suspend on low during the day when patient is frequently interacting with their pump

### 4 Options for Alerts

	Using Suspend before Low	Using Suspend on Low	Using no suspend
Alert before low	<b>OPTIONAL ALERT</b> Alerts when insulin suspends	<b>OPTIONAL ALERT</b> Alerts when SG is predicted to reach low limit within 30 minutes	<b>OPTIONAL ALERT</b> Alerts when SG is predicted to reach low limit within 30 minutes
Alert on low	<b>ALERT NOT OPTIONAL - ALWAYS ON</b> Alerts when SG reaches or falls below low alert	<b>ALERT NOT OPTIONAL - ALWAYS ON</b> Alerts when SG reaches or falls below low alert and insulin suspends	<b>OPTIONAL ALERT</b> Alerts when SG reaches or falls below low alert
Resume basal alert	<b>OPTIONAL ALERT</b> Alerts when insulin resumes based on SG	<b>OPTIONAL ALERT</b> Alerts when insulin resumes based on SG	N/A

#### Considerations

- Keep optional alerts off to minimise patient burden
- Use Alert before low during the day to prompt patient involvement

#### Snooze

- Time before alert repeats after cleared if condition still exists
- Allows time for patient to treat hypoglycaemia and glucose to rise
- One setting applies to all low alerts
- Can be set from 5 minutes to 1 hour

#### Considerations

- Default of 20 minutes generally appropriate

\* Insulin delivery is suspended when sensor glucose is at or within 3.9 mmol/L above the low limit and predicted to be at or within 1.1 mmol/L above the low limit in 30 minutes.

\*\* Insulin delivery resumes when sensor glucose is at least 1.1 mmol/L above the low limit and predicted to be more than 2.2 mmol/L above in 30 minutes.

## HIGH SETTINGS

High alerts are intended to detect actual or impending hyperglycaemia so the patient can respond and prevent or reduce the high excursion. Initial settings are intended to balance safety while minimising unnecessary alerts. Settings are individualised cases.

*It is recommended that High Settings be Off at CGM initiation to minimise the number of alerts patient receives. Once patient is comfortable using CGM and initial insulin adjustments have been made to improve control, high alerts are added. This generally occurs 1 to 4 weeks after initiation.*

### 1 Determine Time Segments

- Up to 8 time segments can be set for 24 hour day
- Different high settings can be selected for each time segment

#### Considerations

- Use one time segment for entire 24 hour period

### 2 Determine High Limit for each time segment

- Can be set between 5.6 mmol/L - 22.2 mmol/L in increments of 0.2

#### Considerations

- Start at 13.8 mmol/L once high alerts are turned on
- Decrease the limit as glucose control improves and hyperglycaemia decreases
- Alternatively may use Medtronic CareLink® data to determine initial setting
- If patient reports too many alerts, increase the limit with therapy adjustments

### 3 Options for Alerts

#### Alert before high

- Alerts when high glucose is predicted to occur
- Used to prevent or reduce the severity of high glucose excursion
- Time can be set between 5 - 30 minutes in 5 minutes increments

#### Alert on high

- Alerts when SG reaches the high limit

#### Rate Alert

- Alerts when SG has risen at a specified rate of change
- Can be used as indicator for missed boluses
- Rise Limit can be set to alert
  - when 1, 2 or 3 trend arrows display on the pump screen
  - at rate you set between 0.50 - 0.275 mmol/L/min

#### Considerations

- Leave Off to decrease the burden of frequent alerts with limited perceived value
- Using with Alert on high will likely result in excessive alerts
- Set at 15 minutes if On
- Off at initiation
- Turn On after initial insulin adjustments have been made to improve control
- Adjust high limit as needed
- Leave Off to decrease the burden of frequent alerts with limited perceived value
- Set at 0.220 mmol/L/min to alert patients only of very rapid changes that may occur
- If patient reports too many alerts, increase rate alert or turn alert off

#### Snooze

- Time before alert repeats after cleared if condition still exists
- Allows time for insulin to take effect and high glucose to decrease
- One setting applies to all high alerts
- Can be set from 5 minutes to 3 hours

#### Considerations

- Set at 2 hours

# CONTINUOUS GLUCOSE MONITORING INITIATION SETTINGS

## Prescriber's Instructions to Patient

Patient Name: \_\_\_\_\_ DOB: \_\_\_\_\_ Date: \_\_\_\_\_

**Low Settings:**

TIME SEGMENTS	LOW LIMIT	CHOOSE SMARTGUARD™ OPTION AND ALERTS					
00:00 - _____	2.8-5 mmol/L (increments of 0.2)  _____ mmol/L	<input type="checkbox"/> Suspend before low	OR	<input type="checkbox"/> Suspend on low	OR	<input type="checkbox"/> No suspend by sensor	
		Alert before Low <input type="checkbox"/>		Alert before Low <input type="checkbox"/>		Alert before low <input type="checkbox"/>	
		Resume Basal Alert <input type="checkbox"/>		Resume Basal Alert <input type="checkbox"/>		Alert on low <input type="checkbox"/>	
_____ - _____	_____ mmol/L	<input type="checkbox"/> Suspend before low	OR	<input type="checkbox"/> Suspend on low	OR	<input type="checkbox"/> No suspend by sensor	
		Alert before Low <input type="checkbox"/>		Alert before Low <input type="checkbox"/>		Alert before low <input type="checkbox"/>	
		Resume Basal Alert <input type="checkbox"/>		Resume Basal Alert <input type="checkbox"/>		Alert on low <input type="checkbox"/>	
_____ - _____	_____ mmol/L	<input type="checkbox"/> Suspend before low	OR	<input type="checkbox"/> Suspend on low	OR	<input type="checkbox"/> No suspend by sensor	
		Alert before Low <input type="checkbox"/>		Alert before Low <input type="checkbox"/>		Alert before low <input type="checkbox"/>	
		Resume Basal Alert <input type="checkbox"/>		Resume Basal Alert <input type="checkbox"/>		Alert on low <input type="checkbox"/>	

**Low Snooze:** \_\_\_\_\_ minutes (5 min to 1 hour; Default setting is 20 minutes)

**High Settings:**

High Alerts Off at initiation. Settings below begin \_\_\_\_\_ (date)

TIME SEGMENTS	HIGH LIMIT	CHOOSE HIGH ALERTS		
00:00 - _____	5.6-22.2 mmol/L (increments of 0.2)  _____ mmol/L <b>OR</b> <input type="checkbox"/> High Alerts Off	Alert before High <input type="checkbox"/> Time: _____ minutes (5-30 min)	Alert on High <input type="checkbox"/>	Rise Alert <input type="checkbox"/> Rise Limit: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 arrows <b>OR</b> <input type="checkbox"/> Custom _____ mmol/L (0.050-0.275 mmol/L/min)
_____ - _____	_____ mmol/L <b>OR</b> <input type="checkbox"/> High Alerts Off	Alert before High <input type="checkbox"/> Time: _____ minutes (5-30 min)	Alert on High <input type="checkbox"/>	Rise Alert <input type="checkbox"/> Rise Limit: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 arrows <b>OR</b> <input type="checkbox"/> Custom _____ mmol/L (0.050-0.275 mmol/L/min)
_____ - _____	_____ mmol/L <b>OR</b> <input type="checkbox"/> High Alerts Off	Alert before High <input type="checkbox"/> Time: _____ minutes (5-30 min)	Alert on High <input type="checkbox"/>	Rise Alert <input type="checkbox"/> Rise Limit: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 arrows <b>OR</b> <input type="checkbox"/> Custom _____ mmol/L (0.050-0.275 mmol/L/min)

**High Snooze:** \_\_\_\_\_ minutes (5 min to 3 hours; Default setting is 1 hour)

- Yes, patient may adjust settings as necessary after initial use.
- No, it is preferred that the patient not adjust settings without consulting prescriber.

Notes (optional): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Prescriber Name: \_\_\_\_\_

Prescriber Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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