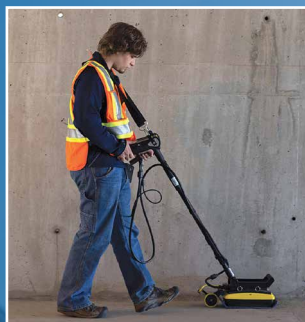


SENSORS & SOFTWARE
from RADIODETECTION



NOGGIN[®] Catalog

If you need a high-performance, configurable GPR that is adaptable for multiple applications, the NOGGIN is the right choice for you.



NOGGINs® provide optimal flexibility and performance

5 Sensors

5 Configurations

HIGHER RESOLUTION

DEEPER PENETRATION

1000



SmartCart®

Durable, 4-wheeled, folding cart; provides rapid data collection in open areas.



500



SmartTow™

Light, compact hand-tow configuration; traverse rough or difficult terrain.



250



SmartSled™

Hand or vehicle tow over rough terrain or survey large areas quickly.



100



SmartChariot™

Rugged, vehicle hitch-mounted; rapidly survey large, flat areas such as roads, parking lots and golf courses.

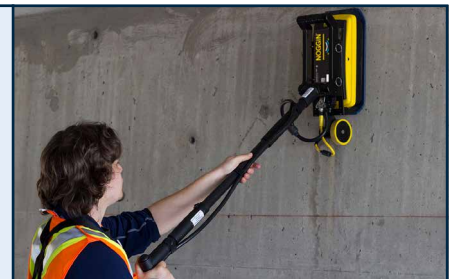


Ultra 100



SmartHandle™

Versatile, compact handle; operates on vertical or overhead surfaces and in confined spaces.



Use your Noggin system to expand your business into new markets. Easily add another frequency, a new configuration or accessories to your existing Noggin system and your subsurface investigation opportunities are limitless.

NOGGIN Applications



NOGGIN 1000



NOGGIN 500



NOGGIN 250



NOGGIN 100

SHALLOW, HIGHER RESOLUTION

DEEPER PENETRATION



Concrete



Archaeology



Mining



Bathymetry



Roads/Bridges



Forensics



Utility Locating



Geology



Glaciers/Ice Sheets



NOGGIN Configuration features

GNSS

for geo-referencing data

Foldable cart
for easy transport

12 Volt battery
in case

SmartCart

Fiberglass
to eliminate signal
interference

Interchangeable
brackets
allow any Noggin
sensor to be attached

Optical odometer
for precise positioning

SmartSled cover

to protect equipment from dust,
debris and water

Optical odometer
for precise positioning

Tow hitch
for use on any vehicle:
truck, ATV's, tractors,
golf carts, snowmobiles

SmartTow

Fiberglass
to eliminate interference

Optical odometer
for precise positioning

Interchangeable
brackets
allow any Noggin
sensor to be attached

Rugged treaded tire
for challenging terrains

SmartHandle

Tow hitch
for any vehicle

Fiberglass
to eliminate
interference

Optical odometer
for precise positioning

SmartChariot

GNSS
for geo-referencing data

Fiberglass
to eliminate interference

Ground Coupled
for maximum penetration

SmartSled

Rugged treaded tire
for challenging terrains

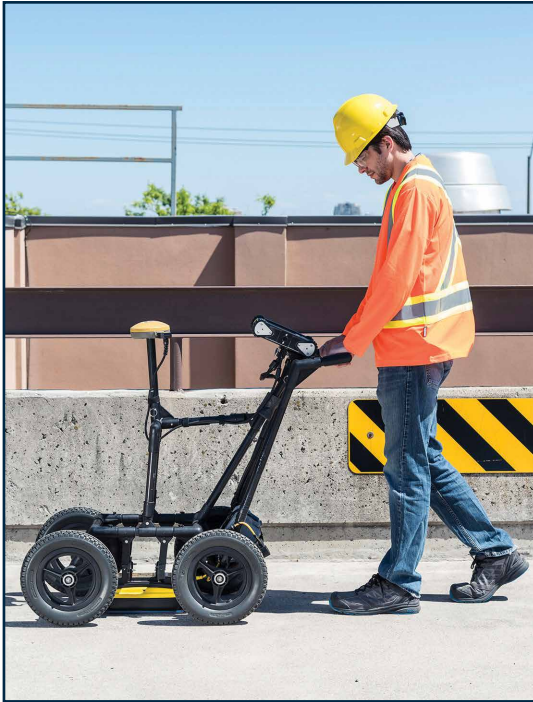


Choose the **NOGGIN** and configuration that is right for you. Or mix and match.

	SmartCart	SmartTow	SmartSled	SmartChariot	SmartHandle
 NOGGIN 1000	Page 6 	Page 20 	Page 43 	Page 34 	Page 52 
 NOGGIN 500	Page 9 	Page 23 	Page 46 	Page 37 	Page 55 
 NOGGIN 250	Page 12 	Page 26 	Page 49 	Page 40 	N/A
 NOGGIN 100	Page 15 	Page 29 	N/A	N/A	N/A
 NOGGIN Ultra 100	Page 16 	Page 30 	N/A	N/A	N/A
 NOGGIN Ultra 100 HP	Page 17 	Page 31 	N/A	N/A	N/A



NOGGIN 1000 SmartCart System (100-10-0158)



Data Logger:

DVL-500N
100-22-0089

Configuration:

Noggin 1000 SmartCart
100-53-0135

Includes 1.75m cable,
SmartCart battery
and battery charger

GPR Sensor:

Noggin 1000
100-22-0063

*GNSS and mount shown are optional

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for Noggin 250/500/1000 SmartCart	100-54-0161
GNSS-RTK	GPR-SG with RTK Package for Noggin 250/500/1000 SmartCart	100-54-0161-RTK
Spare Battery	Noggin/pulseEKKO® Power Source with Case	100-55-0021
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin SmartCart Cable (1.75m)	100-52-0048
Other Cable Lengths	2.5, 5, 10, 15 meters	See Noggin Accessories page
Deluxe Shipping Case	SmartCart ATA Shipping Case (with DVL Bag)	100-60-0063



NOGGIN 1000 SmartCart System:

Add another Noggin

System & Configuration	New System & Configuration	Part Numbers Required
Noggin 1000 SmartCart 	Noggin 100 SmartCart 	100-22-0060: Noggin 100 or 100-22-0108: Noggin Ultra 100 or 100-22-0115: Noggin Ultra 100 HP* 100-53-0086: 1/2m SmartCart Separation Kit 100-52-0091: Odometer extension cable (0.45m) Optional Items: 100-53-0102: pulseEKKO/Noggin 100 SmartCart GNSS mount 100-52-0154: GPR-SG Geode GNSS Cable (2.75m)
	Noggin 250 SmartCart 	100-22-0061: Noggin 250 100-53-0125: Noggin 250 Cart Conversion kit w/ swivel Mounting Posts
	Noggin 500 SmartCart 	100-22-0062: Noggin 500 100-53-0126: Noggin 500 Cart Conversion kit w/ swivel Mounting Posts

*Not available in all countries. Check with your distributor.



NOGGIN 1000 SmartCart System:

Add another Configuration

System & Configuration	Additional Configuration	Part Number
Noggin 1000 SmartCart 	Noggin 1000 SmartTow 	100-53-0128: Noggin 250/500/1000 SmartTow Configuration Optional Item: 100-52-0154: GPR-SG Geode GNSS Cable (2.75m)
	Noggin 1000 SmartChariot 	100-53-0130: Noggin 250/500/1000 SmartChariot Configuration Optional Item: 100-52-0155: GPR-SG Geode GNSS Cable (13m)
	Noggin 1000 SmartSled 	100-53-0131: Noggin 250/500/1000 SmartSled Configuration Optional Item: 100-52-0155: GPR-SG Geode GNSS Cable (13m)
	Noggin 1000 SmartHandle 	100-53-0118: Noggin 1000 SmartHandle Configuration



NOGGIN 500 SmartCart System (100-10-0157)



Data Logger:

DVL-500N
100-22-0089

Configuration:

Noggin 500 SmartCart
100-53-0134

Includes 1.75m cable,
SmartCart battery
and battery charger

GPR Sensor:

Noggin 500
100-22-0062

*GNSS and mount shown are optional

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for Noggin 250/500/1000 SmartCart	100-54-0161
GNSS-RTK	GPR-SG with RTK Package for Noggin 250/500/1000 SmartCart	100-54-0161-RTK
Spare Battery	Noggin/pulseEKKO Power Source with Case	100-55-0021
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin SmartCart Cable (1.75m)	100-52-0048
Other Cable Lengths	2.5, 5, 10, 15 meters	See Noggin Accessories page
Deluxe Shipping Case	SmartCart ATA Shipping Case (with DVL Bag)	100-60-0063



NOGGIN 500 SmartCart System:

Add another Noggin

System & Configuration	New System & Configuration	Part Numbers Required
Noggin 500 SmartCart 	Noggin 100 SmartCart 	100-22-0060: Noggin 100 or 100-22-0108: Noggin Ultra 100 or 100-22-0115: Noggin Ultra 100 HP* 100-53-0086: 1/2m SmartCart Separation Kit 100-52-0091: Odometer extension cable (0.45m) Optional Items: 100-53-0102: pulseEKKO/Noggin 100 SmartCart GNSS mount 100-52-0154: GPR-SG Geode GNSS Cable (2.75m)
	Noggin 250 SmartCart 	100-22-0061: Noggin 250 100-53-0125: Noggin 250 Cart Conversion kit w/ swivel Mounting Posts
	Noggin 1000 SmartCart 	100-22-0063: Noggin 1000 100-53-0127: Noggin 1000 Cart Conversion kit w/ swivel Mounting Posts

*Not available in all countries. Check with your distributor.



NOGGIN 500 SmartCart System:

Add another Configuration

System & Configuration	Additional Configuration	Part Number
Noggin 500 SmartCart 	Noggin 500 SmartTow 	100-53-0128: Noggin 250/500/1000 SmartTow Configuration Optional Item: 100-52-0154: GPR-SG Geode GNSS Cable (2.75m)
	Noggin 500 SmartChariot 	100-53-0130: Noggin 250/500/1000 SmartChariot Configuration Optional Item: 100-52-0155: GPR-SG Geode GNSS Cable (13m)
	Noggin 500 SmartSled 	100-53-0131: Noggin 250/500/1000 SmartSled Configuration Optional Item: 100-52-0155: GPR-SG Geode GNSS Cable (13m)
	Noggin 500 SmartHandle 	100-53-0117: Noggin 500 SmartHandle Configuration



NOGGIN 250 SmartCart System (100-10-0156)



Data Logger:

DVL-500N
100-22-0089



Configuration:

Noggin 250 SmartCart
100-53-0132

Includes 1.75m cable,
SmartCart battery
and battery charger

GPR Sensor:

Noggin 250
100-22-0061

*GNSS and mount shown are optional

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for Noggin 250/500/1000 SmartCart	100-54-0161
GNSS-RTK	GPR-SG with RTK Package for Noggin 250/500/1000 SmartCart	100-54-0161-RTK
Spare Battery	Noggin/pulseEKKO Power Source with Case	100-55-0021
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin SmartCart Cable (1.75m)	100-52-0048
Other Cable Lengths	2.5, 5, 10, 15 meters	See Noggin Accessories page
Deluxe Shipping Case	SmartCart ATA Shipping Case (with DVL Bag)	100-60-0063



NOGGIN 250 SmartCart System:

Add another Noggin

System & Configuration	New System & Configuration	Part Numbers Required
Noggin 250 SmartCart 	Noggin 100 SmartCart 	100-22-0060: Noggin 100 or 100-22-0108: Noggin Ultra 100 or 100-22-0115: Noggin Ultra 100 HP* 100-53-0086: 1/2m SmartCart Separation Kit 100-52-0091: Odometer extension cable (0.45m) Optional Items: 100-53-0102: pulseEKKO/Noggin 100 SmartCart GNSS mount 100-52-0154: GPR-SG Geode GNSS Cable (2.75m)
	Noggin 500 SmartCart 	100-22-0062: Noggin 500 100-53-0126: Noggin 500 Cart Conversion kit w/ swivel Mounting Posts
	Noggin 1000 SmartCart 	100-22-0063: Noggin 1000 100-53-0127: Noggin 1000 Cart Conversion kit w/ swivel Mounting Posts

*Not available in all countries. Check with your distributor.



NOGGIN 250 SmartCart System:

Add another Configuration

System & Configuration	Additional Configuration	Part Number
Noggin 250 SmartCart 	Noggin 250 SmartTow 	100-53-0128: Noggin 250/500/1000 SmartTow Configuration Optional Item: 100-52-0154: GPR-SG Geode GNSS Cable (2.75m)
	Noggin 250 SmartChariot 	100-53-0130: Noggin 250/500/1000 SmartChariot Configuration Optional Item: 100-52-0155: GPR-SG Geode GNSS Cable (13m)
	Noggin 250 SmartSled 	100-53-0131: Noggin 250/500/1000 SmartSled Configuration Optional Item: 100-52-0155: GPR-SG Geode GNSS Cable (13m)

NOGGIN 100 SmartCart System (100-10-0155)



Data Logger:

DVL-500N
100-22-0089

*

Configuration:

Noggin 100 SmartCart
100-53-0133

Includes 1.75m cable, 0.45m
odometer extension cable,
SmartCart battery
and battery charger

GPR Sensor:

Noggin 100
100-22-0060



*GNSS and mount shown are optional

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for Noggin 100/pE SmartCart	100-54-0162
GNSS-RTK	GPR-SG with RTK Package for Noggin 100/pE SmartCart	100-54-0162-RTK
Spare Battery	Noggin/pulseEKKO Power Source with Case	100-55-0021
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin SmartCart Cable (1.75m)	100-52-0048
Other Cable Lengths	2.5, 5, 10, 15 meters	See Noggin Accessories page
Deluxe Shipping Case	SmartCart ATA Shipping Case (with DVL Bag)	100-60-0063

NOGGIN Ultra 100 SmartCart System (100-10-0182)



Data Logger:

DVL-500N
100-22-0089

Configuration:

Noggin 100 SmartCart
100-53-0133

Includes 1.75m cable,
0.45m odometer
extension cable,
SmartCart battery
and battery charger

GPR Sensor:

Noggin Ultra 100
100-22-0108

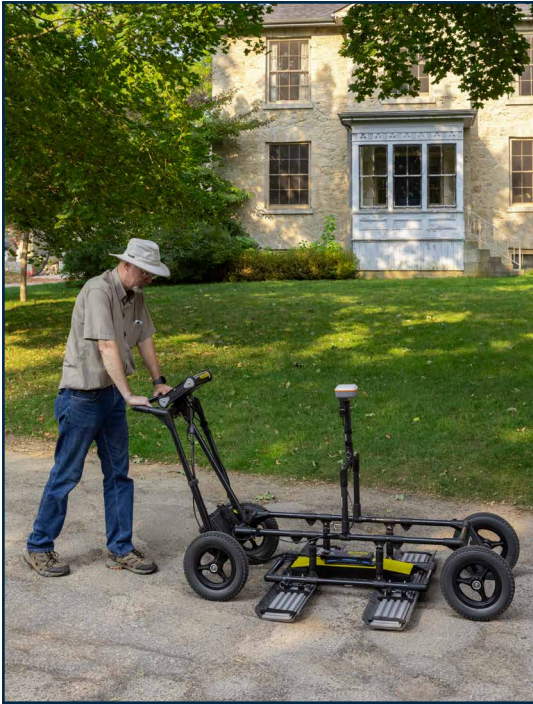
*GNSS and mount shown are optional

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for Noggin 100/pE SmartCart	100-54-0162
GNSS-RTK	GPR-SG with RTK Package for Noggin 100/pE SmartCart	100-54-0162-RTK
Spare Battery	Noggin/pulseEKKO Power Source with Case	100-55-0021
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin SmartCart Cable (1.75m)	100-52-0048
Other Cable Lengths	2.5, 5, 10, 15 meters	See Noggin Accessories page
Deluxe Shipping Case	SmartCart ATA Shipping Case (with DVL Bag)	100-60-0063



NOGGIN Ultra 100 HP SmartCart System (100-10-0186)*



Data Logger:

DVL-500N
100-22-0089

Configuration:

Noggin 100 SmartCart
100-53-0133

Includes 1.75m cable,
0.45m odometer
extension cable,
SmartCart battery
and battery charger

GPR Sensor:

Noggin Ultra 100 HP*
100-22-0115

*Not available in all countries. Check with your distributor.

**GNSS and mount shown are optional

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for Noggin 100/pE SmartCart	100-54-0162
GNSS-RTK	GPR-SG with RTK Package for Noggin 100/pE SmartCart	100-54-0162-RTK
Spare Battery	Noggin/pulseEKKO Power Source with Case	100-55-0021
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin SmartCart Cable (1.75m)	100-52-0048
Other Cable Lengths	2.5, 5, 10, 15 meters	See Noggin Accessories page
Deluxe Shipping Case	SmartCart ATA Shipping Case (with DVL Bag)	100-60-0063



NOGGIN 100 SmartCart System:

Add another Noggin

System & Configuration	New System & Configuration	Part Numbers Required
Noggin 100 SmartCart 	Noggin 250 SmartCart 	100-22-0061: Noggin 250 100-53-0125: Noggin 250 Cart Conversion kit w/ swivel Mounting Posts Optional Items: 100-53-0101: Noggin 250/500/1000 SmartCart GNSS mount 100-52-0153: GPR-SG Geode GNSS Cable (1.1m)
	Noggin 500 SmartCart 	100-22-0062: Noggin 500 100-53-0126: Noggin 500 Cart Conversion kit w/ swivel Mounting Posts Optional Items: 100-53-0101: Noggin 250/500/1000 SmartCart GNSS mount 100-52-0153: GPR-SG Geode GNSS Cable (1.1m)
	Noggin 1000 SmartCart 	100-22-0063: Noggin 1000 100-53-0127: Noggin 1000 Cart Conversion kit w/ swivel Mounting Posts Optional Items: 100-53-0101: Noggin 250/500/1000 SmartCart GNSS mount 100-52-0153: GPR-SG Geode GNSS Cable (1.1m)

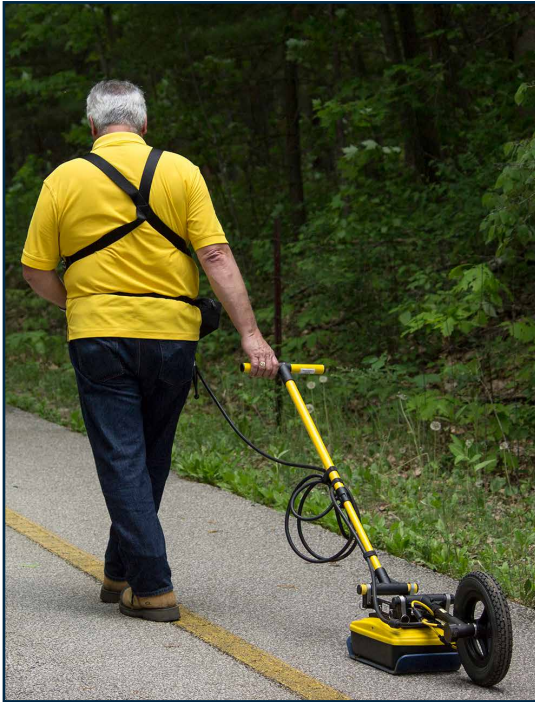
NOGGIN 100 SmartCart System:

Add another Configuration

System & Configuration	Additional Configuration	Part Number
Noggin 100 SmartCart 	Noggin 100 SmartTow 	100-53-0129: Noggin 100 SmartTow Configuration



NOGGIN 1000 SmartTow System (100-10-0192)



Configuration:

Noggin 250/500/1000 SmartTow
100-53-0128

Includes deluxe DVL-500
harness, 2.5m cable, belt
battery and battery charger



Data Logger:

DVL-500N
100-22-0089

GPR Sensor:

Noggin 1000
100-22-0063

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for Noggin SmartTow/SmartHandle	100-54-0164
GNSS-RTK	GPR-SG with RTK Package for SmartTow/SmartHandle	100-54-0164-RTK
GNSS carrier	GNSS Backpack with Pole	100-53-0116
Spare Battery	Belt Battery with Case	100-55-0012
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin SmartHandle Cable (2.5m)	100-52-0051
Other Cable Lengths	1.75, 5, 10, 15 meters	See Noggin Accessories page
Data Logger Case	Deluxe DVL-500 Shipping Case	100-60-0066



NOGGIN 1000 SmartTow System:

Add another Noggin

System & Configuration	New System & Configuration	Part Numbers Required
Noggin 1000 SmartTow 	Noggin 100 SmartTow 	100-22-0060: Noggin 100 or 100-22-0108: Noggin Ultra 100 or 100-22-0115: Noggin Ultra 100 HP* 100-53-0084: 1/2m Tow Frame
	Noggin 250 SmartTow 	100-22-0061: Noggin 250
	Noggin 500 SmartTow 	100-22-0062: Noggin 500

*Not available in all countries. Check with your distributor.



NOGGIN 1000 SmartTow System:

Add another Configuration

System & Configuration	Additional Configuration	Part Number
Noggin 1000 SmartTow 	Noggin 1000 SmartCart 	100-53-0135: Noggin 1000 SmartCart Configuration
	Noggin 1000 SmartChariot 	100-53-0130: Noggin 250/500/1000 SmartChariot Configuration Optional Item: 100-52-0155: GPR-SG Geode GNSS Cable (13m)
	Noggin 1000 SmartSled 	100-53-0131: Noggin 250/500/1000 SmartSled Configuration Optional Item: 100-52-0155: GPR-SG Geode GNSS Cable (13m)
	Noggin 1000 SmartHandle 	100-53-0118: Noggin 1000 SmartHandle Configuration

NOGGIN 500 SmartTow System (100-10-0191)



Configuration:

Noggin 250/500/1000 SmartTow
100-53-0128

Includes deluxe DVL-500
harness, 2.5m cable, belt
battery and battery charger

Data Logger:

DVL-500N
100-22-0089



GPR Sensor:

Noggin 500
100-22-0062

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for Noggin SmartTow/SmartHandle	100-54-0164
GNSS-RTK	GPR-SG with RTK Package for SmartTow/SmartHandle	100-54-0164-RTK
GNSS carrier	GNSS Backpack with Pole	100-53-0116
Spare Battery	Belt Battery with Case	100-55-0012
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin SmartHandle Cable (2.5m)	100-52-0051
Other Cable Lengths	1.75, 5, 10, 15 meters	See Noggin Accessories page
Data Logger Case	Deluxe DVL-500 Shipping Case	100-60-0066



NOGGIN 500 SmartTow System:

Add another Noggin

System & Configuration	New System & Configuration	Part Numbers Required
Noggin 500 SmartTow 	Noggin 100 SmartTow 	100-22-0060: Noggin 100 or 100-22-0108: Noggin Ultra 100 or 100-22-0115: Noggin Ultra 100 HP* 100-53-0084: 1/2m Tow Frame
	Noggin 250 SmartTow 	100-22-0061: Noggin 250
	Noggin 1000 SmartTow 	100-22-0063: Noggin 1000

*Not available in all countries. Check with your distributor.



NOGGIN 500 SmartTow System:

Add another Configuration

System & Configuration	Additional Configuration	Part Number
Noggin 500 SmartTow 	Noggin 500 SmartCart 	100-53-0134: Noggin 500 SmartCart Configuration
	Noggin 500 SmartChariot 	100-53-0130: Noggin 250/500/1000 SmartChariot Configuration Optional Item: 100-52-0155: GPR-SG Geode GNSS Cable (13m)
	Noggin 500 SmartSled 	100-53-0131: Noggin 250/500/1000 SmartSled Configuration Optional Item: 100-52-0155: GPR-SG Geode GNSS Cable (13m)
	Noggin 500 SmartHandle 	100-53-0117: Noggin 500 SmartHandle Configuration

NOGGIN 250 SmartTow System (100-10-0190)



Configuration:

Noggin 250/500/1000 SmartTow
100-53-0128

Includes deluxe DVL-500
harness, 2.5m cable, belt
battery and battery charger

Data Logger:

DVL-500N
100-22-0089



GPR Sensor:

Noggin 250
100-22-0061

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for Noggin SmartTow/SmartHandle	100-54-0164
GNSS-RTK	GPR-SG with RTK Package for SmartTow/SmartHandle	100-54-0164-RTK
GNSS carrier	GNSS Backpack with Pole	100-53-0116
Spare Battery	Belt Battery with Case	100-55-0012
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin SmartHandle Cable (2.5m)	100-52-0051
Other Cable Lengths	1.75, 5, 10, 15 meters	See Noggin Accessories page
Data Logger Case	Deluxe DVL-500 Shipping Case	100-60-0066



NOGGIN 250 SmartTow System:

Add another Noggin

System & Configuration	New System & Configuration	Part Numbers Required
Noggin 250 SmartTow 	Noggin 100 SmartTow 	100-22-0060: Noggin 100 or 100-22-0108: Noggin Ultra 100 or 100-22-0115: Noggin Ultra 100 HP* 100-53-0084: 1/2m Tow Frame
	Noggin 500 SmartTow 	100-22-0062: Noggin 500
	Noggin 1000 SmartTow 	100-22-0063: Noggin 1000

*Not available in all countries. Check with your distributor.

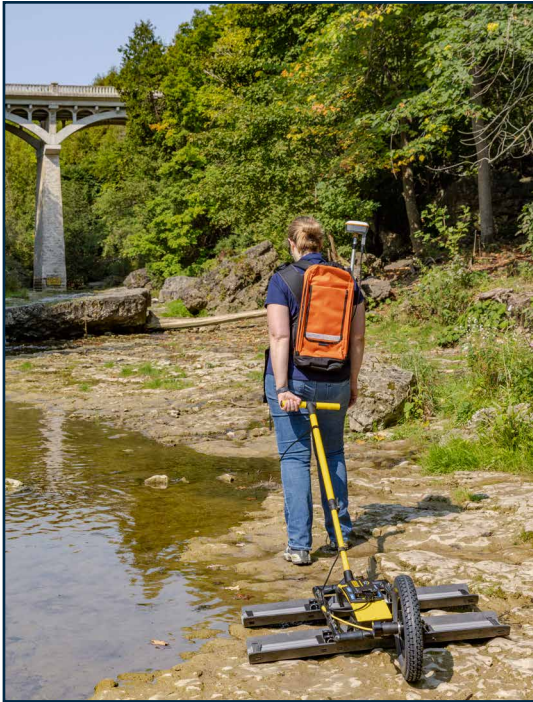


NOGGIN 250 SmartTow System: Add another Configuration

System & Configuration	Additional Configuration	Part Number
Noggin 250 SmartTow 	Noggin 250 SmartCart 	100-53-0132: Noggin 250 SmartCart Configuration Optional Items: 100-53-0101: Noggin 250/500/1000 SmartCart GNSS mount 100-52-0153: GPR-SG Geode GNSS Cable (1.1m)
	Noggin 250 SmartChariot 	100-53-0130: Noggin 250/500/1000 SmartChariot Configuration Optional Item: 100-52-0155: GPR-SG Geode GNSS Cable (13m)
	Noggin 250 SmartSled 	100-53-0131: Noggin 250/500/1000 SmartSled Configuration Optional Item: 100-52-0155: GPR-SG Geode GNSS Cable (13m)



NOGGIN 100 SmartTow System (100-10-0195)



Configuration:

Noggin 100 SmartTow
100-53-0129

Includes deluxe DVL-500 harness,
2.5m cable, belt battery
and battery charger

Data Logger:

DVL-500N
100-22-0089

GPR Sensor:

Noggin 100
100-22-0060

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for Noggin SmartTow/SmartHandle	100-54-0164
GNSS-RTK	GPR-SG with RTK Package for SmartTow/SmartHandle	100-54-0164-RTK
GNSS carrier	GNSS Backpack with Pole	100-53-0116
Spare Battery	Belt Battery with Case	100-55-0012
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin SmartHandle Cable (2.5m)	100-52-0051
Other Cable Lengths	1.75, 5, 10, 15 meters	See Noggin Accessories page
Data Logger Case	Deluxe DVL-500 Shipping Case	100-60-0066

NOGGIN Ultra 100 SmartTow System (100-10-0196)



Configuration:

Noggin 100 SmartTow
100-53-0129

Includes deluxe DVL-500 harness,
2.5m cable, belt battery
and battery charger

Data Logger:

DVL-500N
100-22-0089

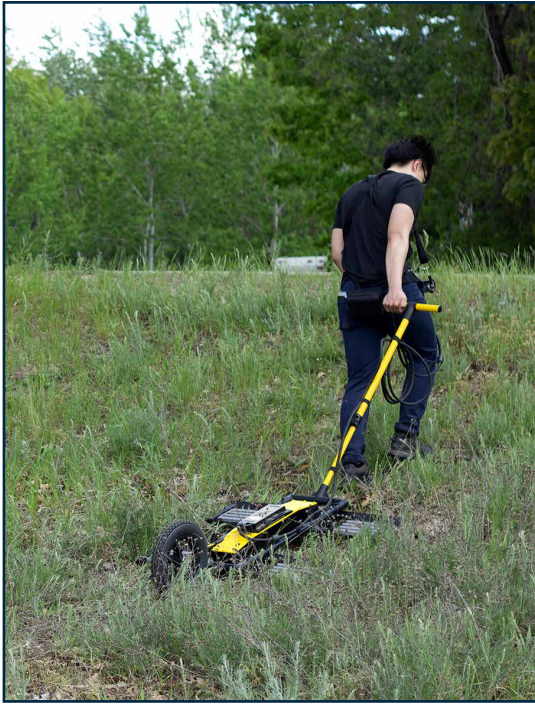
GPR Sensor:

Noggin Ultra 100
100-22-0108

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for Noggin SmartTow/SmartHandle	100-54-0164
GNSS-RTK	GPR-SG with RTK Package for SmartTow/SmartHandle	100-54-0164-RTK
GNSS carrier	GNSS Backpack with Pole	100-53-0116
Spare Battery	Belt Battery with Case	100-55-0012
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin SmartHandle Cable (2.5m)	100-52-0051
Other Cable Lengths	1.75, 5, 10, 15 meters	See Noggin Accessories page
Data Logger Case	Deluxe DVL-500 Shipping Case	100-60-0066

NOGGIN Ultra 100 HP SmartTow System (100-10-0197)*



Configuration:

Noggin 100 SmartTow
100-53-0129

Includes deluxe DVL-500 harness,
2.5m cable, belt battery
and battery charger

Data Logger:

DVL-500N
100-22-0089

GPR Sensor:

Noggin Ultra 100 HP*
100-22-0115

*Not available in all countries. Check with your distributor.

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for Noggin SmartTow/SmartHandle	100-54-0164
GNSS-RTK	GPR-SG with RTK Package for SmartTow/SmartHandle	100-54-0164-RTK
GNSS carrier	GNSS Backpack with Pole	100-53-0116
Spare Battery	Belt Battery with Case	100-55-0012
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin SmartHandle Cable (2.5m)	100-52-0051
Other Cable Lengths	1.75, 5, 10, 15 meters	See Noggin Accessories page
Data Logger Case	Deluxe DVL-500 Shipping Case	100-60-0066



NOGGIN 100 SmartTow System:

Add another Noggin

System & Configuration	New System & Configuration	Part Numbers Required
Noggin 100 SmartTow 	Noggin 250 SmartTow 	100-22-0061: Noggin 250 100-53-0066: (Qty 2): Noggin 250 SmartTow Bracket
	Noggin 500 SmartTow 	100-22-0062: Noggin 500 100-53-0080X: Noggin 500/1000 SmartTow Adapters
	Noggin 1000 SmartTow 	100-22-0063: Noggin 1000 100-53-0080X: Noggin 500/1000 SmartTow Adapters

NOGGIN 100 SmartTow System:

Add another Configuration

System & Configuration	Additional Configuration	Part Number
Noggin 100 SmartTow 	Noggin 100 SmartCart 	100-53-0133: Noggin 100 SmartCart Configuration



NOGGIN 1000 SmartChariot System (100-10-0172)



Data Logger:

DVL-500N
100-22-0089



GPR Sensor:

Noggin 1000
100-22-0063

Configuration:

Noggin 250/500/1000 SmartChariot
100-53-0130

Includes 15m cable,
SmartChariot battery
and battery charger

*GNSS shown is optional

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for SmartChariot/SmartSled	100-54-0163
GNSS-RTK	GPR-SG with RTK Package for SmartChariot/SmartSled	100-54-0163-RTK
Spare Battery	Noggin/pulseEKKO Power Source with Case	100-55-0021
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin to DVL Cable (15m)	100-52-0115
Other Cable Lengths	1.75, 2.5, 5, 10 meters	See Noggin Accessories page
Data Logger Case	Deluxe DVL-500 Shipping Case	100-60-0066



NOGGIN 1000 SmartChariot System:

Add another Noggin

System & Configuration	New System & Configuration	Part Numbers Required
Noggin 1000 SmartChariot 	Noggin 250 SmartChariot 	100-22-0061: Noggin 250
	Noggin 500 SmartChariot 	100-22-0062: Noggin 500



NOGGIN 1000 SmartChariot System:

Add another Configuration

System & Configuration	Additional Configuration	Part Number
Noggin 1000 SmartChariot 	Noggin 1000 SmartCart 	100-53-0135: Noggin 1000 SmartCart Configuration Optional Items: 100-53-0101: Noggin 250/500/1000 SmartCart GNSS mount 100-52-0153: GPR-SG Geode GNSS Cable (1.1m)
	Noggin 1000 SmartTow 	100-53-0128: Noggin 250/500/1000 SmartTow Configuration Optional Item: 100-52-0154: GPR-SG Geode GNSS Cable (2.75m)
	Noggin 1000 SmartSled 	100-53-0131: Noggin 250/500/1000 SmartSled Configuration
	Noggin 1000 Smarthandle 	100-53-0118: Noggin 1000 SmartHandle Configuration

NOGGIN 500 SmartChariot System (100-10-0171)



Data Logger:
DVL-500N
100-22-0089



GPR Sensor:

Noggin 500
100-22-0062

Configuration:

Noggin 250/500/1000 SmartChariot
100-53-0130

Includes 15m cable,
SmartChariot battery
and battery charger

*GNSS shown is optional

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for SmartChariot/SmartSled	100-54-0163
GNSS-RTK	GPR-SG with RTK Package for SmartChariot/SmartSled	100-54-0163-RTK
Spare Battery	Noggin/pulseEKKO Power Source with Case	100-55-0021
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin to DVL Cable (15m)	100-52-0115
Other Cable Lengths	1.75, 2.5, 5, 10 meters	See Noggin Accessories page
Data Logger Case	Deluxe DVL-500 Shipping Case	100-60-0066



NOGGIN 500 SmartChariot System:

Add another Noggin

System & Configuration	New System & Configuration	Part Numbers Required
Noggin 500 SmartChariot 	Noggin 250 SmartChariot 	100-22-0061: Noggin 250
	Noggin 1000 SmartChariot 	100-22-0063: Noggin 1000



NOGGIN 500 SmartChariot System:

Add another Configuration

System & Configuration	Additional Configuration	Part Number
Noggin 500 SmartChariot 	Noggin 500 SmartCart 	100-53-0134: Noggin 500 SmartCart Configuration Optional Items: 100-53-0101: Noggin 250/500/1000 SmartCart GNSS mount 100-52-0153: GPR-SG Geode GNSS Cable (1.1m)
	Noggin 500 SmartTow 	100-53-0128: Noggin 250/500/1000 SmartTow Configuration Optional Item: 100-52-0154: GPR-SG Geode GNSS Cable (2.75m)
	Noggin 500 SmartSled 	100-53-0131: Noggin 250/500/1000 SmartSled Configuration
	Noggin 500 Smarthandle 	100-53-0117: Noggin 500 SmartHandle Configuration

NOGGIN 250 SmartChariot System (100-10-0170)



Data Logger:
DVL-500N
100-22-0089



GPR Sensor:

Noggin 250
100-22-0061

Configuration:

Noggin 250/500/1000 SmartChariot
100-53-0130

Includes 15m cable,
SmartChariot battery
and battery charger

*GNSS shown is optional

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for SmartChariot/SmartSled	100-54-0163
GNSS-RTK	GPR-SG with RTK Package for SmartChariot/SmartSled	100-54-0163-RTK
Spare Battery	Noggin/pulseEKKO Power Source with Case	100-55-0021
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin to DVL Cable (15m)	100-52-0115
Other Cable Lengths	1.75, 2.5, 5, 10 meters	See Noggin Accessories page
Data Logger Case	Deluxe DVL-500 Shipping Case	100-60-0066



NOGGIN 250 SmartChariot System:

Add another Noggin

System & Configuration	New System & Configuration	Part Numbers Required
Noggin 250 SmartChariot 	Noggin 500 SmartChariot 	100-22-0062: Noggin 500
	Noggin 1000 SmartChariot 	100-22-0063: Noggin 1000



NOGGIN 250 SmartChariot System:

Add another Configuration

System & Configuration	Additional Configuration	Part Number
Noggin 250 SmartChariot 	Noggin 250 SmartCart 	100-53-0132: Noggin 250 SmartCart Configuration Optional Items: 100-53-0101: Noggin 250/500/1000 SmartCart GNSS mount 100-52-0153: GPR-SG Geode GNSS Cable (1.1m)
	Noggin 250 SmartTow 	100-53-0128: Noggin 250/500/1000 SmartTow Configuration Optional Item: 100-52-0154: GPR-SG Geode GNSS Cable (2.75m)
	Noggin 250 SmartSled 	100-53-0131: Noggin 250/500/1000 SmartSled Configuration

NOGGIN 1000 SmartSled System (100-10-0189)



Data Logger:
DVL-500N
100-22-0089

Configuration:

Noggin 250/500/1000 SmartSled
100-53-0131

Includes 15m cable,
1m odometer extension
cable, SmartSled battery
and battery charger



GPR Sensor:

Noggin 1000
100-22-0063

*GNSS shown is optional

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for SmartChariot/SmartSled	100-54-0163
GNSS-RTK	GPR-SG with RTK Package for SmartChariot/SmartSled	100-54-0163-RTK
Spare Battery	Noggin/pulseEKKO Power Source with Case	100-55-0021
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin to DVL Cable (15m)	100-52-0115
Other Cable Lengths	1.75, 2.5, 5, 10 meters	See Noggin Accessories page
Data Logger Case	Deluxe DVL-500 Shipping Case	100-60-0066

NOGGIN 1000 SmartSled System:

Add another Noggin

System & Configuration	New System & Configuration	Part Numbers Required
Noggin 1000 SmartSled 	Noggin 250 SmartSled 	100-22-0061: Noggin 250
	Noggin 500 SmartSled 	100-22-0062: Noggin 500

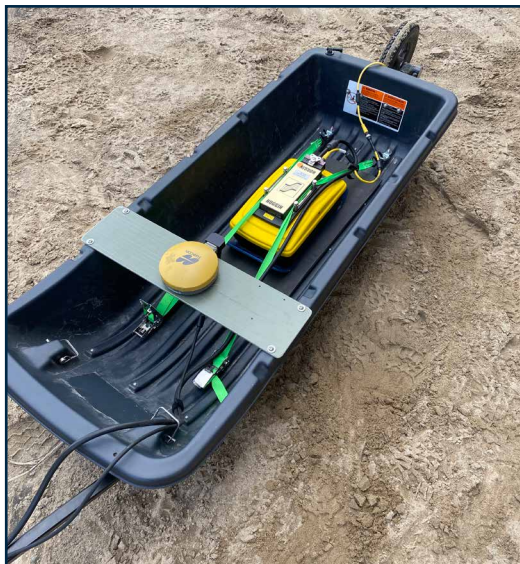


NOGGIN 1000 SmartSled System:

Add another Configuration

System & Configuration	Additional Configuration	Part Number
Noggin 1000 SmartSled 	Noggin 1000 SmartCart 	100-53-0135: Noggin 1000 SmartCart Configuration Optional Items: 100-53-0101: Noggin 250/500/1000 SmartCart GNSS mount 100-52-0153: GPR-SG Geode GNSS Cable (1.1m)
	Noggin 1000 SmartTow 	100-53-0128: Noggin 250/500/1000 SmartTow Configuration Optional Item: 100-52-0154: GPR-SG Geode GNSS Cable (2.75m)
	Noggin 1000 SmartChariot 	100-53-0130: Noggin 250/500/1000 SmartChariot Configuration
	Noggin 1000 Smarthandle 	100-53-0118: Noggin 1000 SmartHandle Configuration

NOGGIN 500 SmartSled System (100-10-0188)



Data Logger:
DVL-500N
100-22-0089

Configuration:

Noggin 250/500/1000 SmartSled
100-53-0131

Includes 15m cable,
1m odometer extension
cable, SmartSled battery
and battery charger



GPR Sensor:

Noggin 500
100-22-0062

*GNSS shown is optional

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for SmartChariot/SmartSled	100-54-0163
GNSS-RTK	GPR-SG with RTK Package for SmartChariot/SmartSled	100-54-0163-RTK
Spare Battery	Noggin/pulseEKKO Power Source with Case	100-55-0021
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin to DVL Cable (15m)	100-52-0115
Other Cable Lengths	1.75, 2.5, 5, 10 meters	See Noggin Accessories page
Data Logger Case	Deluxe DVL-500 Shipping Case	100-60-0066

NOGGIN 500 SmartSled System:

Add another Noggin

System & Configuration	New System & Configuration	Part Numbers Required
Noggin 500 SmartSled 	Noggin 250 SmartSled 	100-22-0062: Noggin 500
	Noggin 1000 SmartSled 	100-22-0063: Noggin 1000

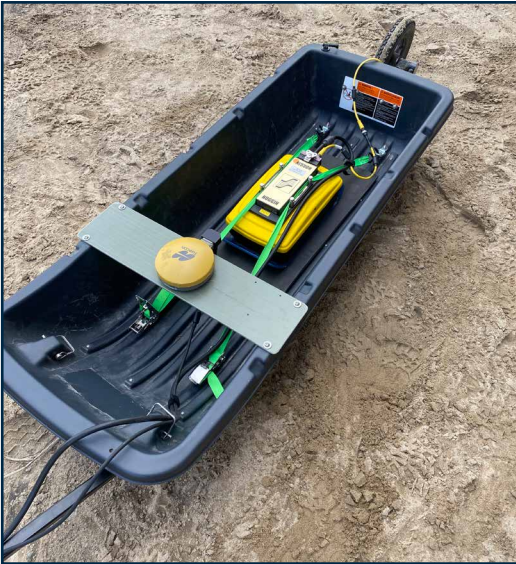


NOGGIN 500 SmartSled System:

Add another Configuration

System & Configuration	Additional Configuration	Part Number
Noggin 500 SmartSled 	Noggin 500 SmartCart 	100-53-0134: Noggin 500 SmartCart Configuration Optional Items: 100-53-0101: Noggin 250/500/1000 SmartCart GNSS mount 100-52-0153: GPR-SG Geode GNSS Cable (1.1m)
	Noggin 500 SmartTow 	100-53-0128: Noggin 250/500/1000 SmartTow Configuration Optional Item: 100-52-0154: GPR-SG Geode GNSS Cable (2.75m)
	Noggin 500 SmartChariot 	100-53-0130: Noggin 250/500/1000 SmartChariot Configuration
	Noggin 500 Smarthandle 	100-53-0117: Noggin 500 SmartHandle Configuration

NOGGIN 250 SmartSled System (100-10-0185)



Data Logger:
DVL-500N
100-22-0089

Configuration:

Noggin 250/500/1000 SmartSled
100-53-0131

Includes 15m cable,
1m odometer extension
cable, SmartSled battery
and battery charger



GPR Sensor:
Noggin 250
100-22-0061

*GNSS shown is optional

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for SmartChariot/SmartSled	100-54-0163
GNSS-RTK	GPR-SG with RTK Package for SmartChariot/SmartSled	100-54-0163-RTK
Spare Battery	Noggin/pulseEKKO Power Source with Case	100-55-0021
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin to DVL Cable (15m)	100-52-0115
Other Cable Lengths	1.75, 2.5, 5, 10 meters	See Noggin Accessories page
Data Logger Case	Deluxe DVL-500 Shipping Case	100-60-0066

NOGGIN 250 SmartSled System:

Add another Noggin

System & Configuration	New System & Configuration	Part Numbers Required
Noggin 250 SmartSled 	Noggin 500 SmartSled 	100-22-0062: Noggin 500
	Noggin 1000 SmartSled 	100-22-0063: Noggin 1000

NOGIN 250 SmartSled System: Add another Configuration

System & Configuration	Additional Configuration	Part Number
Noggin 250 SmartSled 	Noggin 250 SmartCart 	100-53-0132: Noggin 250 SmartCart Configuration Optional Items: 100-53-0101: Noggin 250/500/1000 SmartCart GNSS mount 100-52-0153: GPR-SG Geode GNSS Cable (1.1m)
	Noggin 250 SmartTow 	100-53-0128: Noggin 250/500/1000 SmartTow Configuration Optional Item: 100-52-0154: GPR-SG Geode GNSS Cable (2.75m)
	Noggin 250 SmartChariot 	100-53-0130: Noggin 250/500/1000 SmartChariot Configuration



NOGGIN 1000 SmartHandle System (100-10-0194)



Configuration:

Noggin 1000 SmartHandle
100-53-0118

Includes deluxe DVL-500
harness, 2.5m cable, belt
battery and battery charger

Data Logger:

DVL-500N
100-22-0089



GPR Sensor:

Noggin 1000
100-22-0063

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for SmartTow/SmartHandle	100-54-0164
GNSS-RTK	GPR-SG with RTK Package for SmartTow/SmartHandle	100-54-0164-RTK
GNSS carrier	GNSS Backpack with Pole	100-53-0116
Spare Battery	Belt Battery with Case	100-55-0012
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin SmartHandle Cable (2.5m)	100-52-0051
Other Cable Lengths	1.75, 5, 10, 15 meters	See Noggin Accessories page

NOGGIN 1000 SmartHandle System:

Add another Noggin

System & Configuration	New System & Configuration	Part Numbers Required
Noggin 1000 SmartHandle 	Noggin 500 SmartHandle 	100-22-0062: Noggin 500 100-54-0078: Noggin 500 odometer with bracket



NOGGIN 1000 SmartHandle System:

Add another Configuration

System & Configuration	Additional Configuration	Part Number
Noggin 1000 SmartHandle 	Noggin 1000 SmartCart 	100-53-0135: Noggin 1000 SmartCart Configuration Optional Items: 100-53-0101: Noggin 250/500/1000 SmartCart GNSS mount 100-52-0153: GPR-SG Geode GNSS Cable (1.1m)
	Noggin 1000 SmartTow 	100-53-0128: Noggin 250/500/1000 SmartTow Configuration Optional Item: 100-52-0154: GPR-SG Geode GNSS Cable (2.75m)
	Noggin 1000 SmartSled 	100-53-0131: Noggin 250/500/1000 SmartSled Configuration
	Noggin 1000 SmartChariot 	100-53-0130: Noggin 250/500/1000 SmartChariot Configuration



NOGGIN 500 SmartHandle System (100-10-0193)



Configuration:

Noggin 500 SmartHandle
100-53-0117

Includes deluxe DVL-500
harness, 2.5m cable, belt
battery and battery charger

Data Logger:

DVL-500N
100-22-0089



GPR Sensor:

Noggin 500
100-22-0062

Optional Accessories (see photos on Noggin Accessories page)

System Component	Part Name	Part Number
GNSS	GPR-SG Package for SmartTow/SmartHandle	100-54-0164
GNSS-RTK	GPR-SG with RTK Package for SmartTow/SmartHandle	100-54-0164-RTK
GNSS carrier	GNSS Backpack with Pole	100-53-0116
Spare Battery	Belt Battery with Case	100-55-0012
Spare Battery Charger	Battery Charger	100-55-0028
Spare Cable	Noggin SmartHandle Cable (2.5m)	100-52-0051
Other Cable Lengths	1.75, 5, 10, 15 meters	See Noggin Accessories page

NOGGIN 500 SmartHandle System:

Add another Noggin

System & Configuration	New System & Configuration	Part Numbers Required
Noggin 500 SmartHandle 	Noggin 1000 SmartHandle 	100-22-0063: Noggin 1000 100-54-0077: Noggin 1000 odometer with bracket



NOGGIN 500 SmartHandle System:

Add another Configuration

System & Configuration	Additional Configuration	Part Number
Noggin 500 SmartHandle 	Noggin 500 SmartCart 	100-53-0134: Noggin 500 SmartCart Configuration Optional Items: 100-53-0101: Noggin 250/500/1000 SmartCart GNSS mount 100-52-0153: GPR-SG Geode GNSS Cable (1.1m)
	Noggin 500 SmartTow 	100-53-0128: Noggin 250/500/1000 SmartTow Configuration Optional Item: 100-52-0154: GPR-SG Geode GNSS Cable (2.75m)
	Noggin 500 SmartSled 	100-53-0131: Noggin 250/500/1000 SmartSled Configuration
	Noggin 500 SmartChariot 	100-53-0130: Noggin 250/500/1000 SmartChariot Configuration



NOGGIN Accessories: GPS / GNSS



100-22-0123: GPR-SG Geode GNSS with 10 Hz Upgrade
100-22-0124: GPR-SG RTK Upgrade



100-52-0153: GPR-SG Geode GNSS Cable (1.1m)
100-52-0154: GPR-SG Geode GNSS Cable (2.75m)
100-52-0155: GPR-SG Geode GNSS Cable (13m)



100-53-0101: Noggin SmartCart GNSS Mount
100-53-0102: pulseEKKO/Noggin 100 SmartCart GNSS mount



GNSS Backpack with Pole: 100-53-0116
(GNSS not included)

GPR-SG Package for Noggin 250/500/1000 SmartCart: 100-54-0161

Consists of:

- 100-22-0123: GPR-SG Geode with 10 Hz Upgrade
- 100-52-0153: GPR-SG Geode GNSS Cable (1.1m)
- 100-53-0101: Noggin 250/500/1000 GNSS mount

GPR-SG Package for Noggin 100 SmartCart: 100-54-0162

Consists of:

- 100-22-0123: GPR-SG Geode with 10 Hz Upgrade
- 100-52-0154: GPR-SG Geode GNSS Cable (2.75m)
- 100-53-0102: Noggin 100 GNSS mount

GPR-SG Package for SmartTow/SmartHandle: 100-54-0164

Consists of:

- 100-22-0123: GPR-SG Geode with 10 Hz Upgrade
- 100-52-0154: GPR-SG Geode GNSS Cable (2.75m)

GPR-SG Package for SmartChariot/SmartSled: 100-54-0163

Consists of:

- 100-22-0123: GPR-SG Geode with 10 Hz Upgrade
- 100-52-0155: GPR-SG Geode GNSS Cable (13m)

All of the above GPR-SG packages are available with RTK upgrade (100-22-0124) by adding “-RTK” to the part number, for example, 100-54-0161-RTK.



NOGGIN Optional Accessories

Spare SmartCart/Chariot/Sled Battery with Case

100-55-0021



Spare SmartTow/Handle Belt Battery with Case

100-55-0012



Spare Battery Charger

100-55-0028



SmartCart ATA Shipping Case (with DVL Bag)

100-60-0063



Spare Noggin Cables

SmartCart (1.75m) 100-52-0048

SmartTow/Handle (2.5m) 100-52-0051

SmartChariot/Sled (15m) 100-52-0115



Other cable lengths available:

- 5m, 100-52-0049
- 10m, 100-52-0099

Specialty Noggin Cables

- 0.75m, 100-52-0049 (no odom input)
- 10m, 100-52-0050 (opposite odom input)

Noggin Spare Parts Kit

100-54-0157

One Spare Parts Kit is included with every Noggin system



Deluxe DVL-500 Case

100-60-0066 (DVL-500 not included)



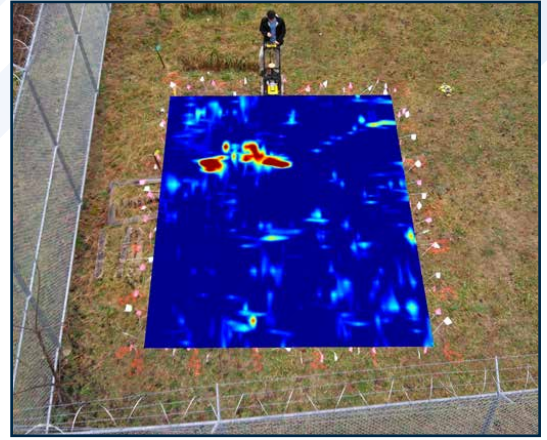
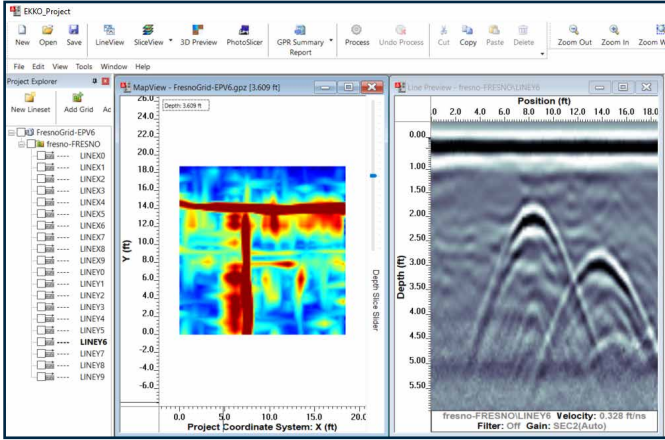
Soft-sided Display Unit & GPR Accessories Carry Bag

100-60-0059



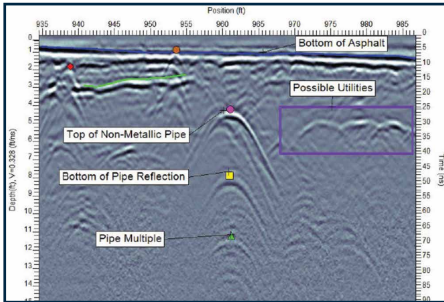
EKKO_Project™ GPR Software

Visualize, Understand and Report your GPR results with the optional EKKO_Project PC Software

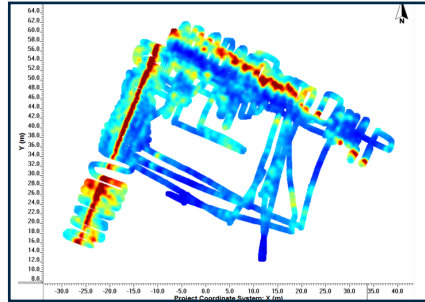


Core

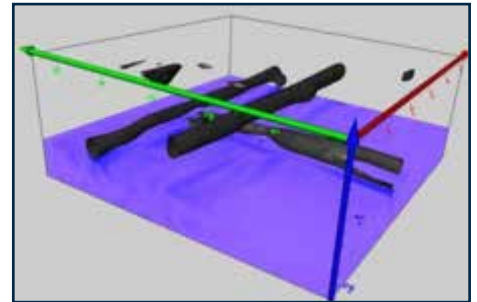
Organize your GPR data, photos and other files and save as a single project file. Easily create PDF reports of your findings.



Examine (Cross-sections)



Reveal (Depth Slices)



3D Reveal (3D Visualization)

Software Bundle	Part Number
Core	100-11-0130
Examine	100-11-0131
Reveal	100-11-0132
Suite	100-11-0133
3D Reveal	100-11-0134
3D Suite	100-11-0135

2 and 3 license bundles are available by adding -2L or -3L to the Part Number, for example, 100-11-0134-3L

Optional Modules	Part Number
Bridge Deck Report	100-11-0136
Pavement Structure Report	100-11-0137



Our Mission

Provide best in class equipment and solutions, to prevent damage
to critical infrastructure, manage assets and protect lives.

Our Vision

To be the world's leader in the management of critical infrastructure and utilities.

Our Locations



USA

Raymond, ME
Kearneysville, WV

Canada

Mississauga, ON



Europe

United Kingdom **HQ**
France
Germany
The Netherlands



Asia Pacific

India
Hong Kong
Australia

www.sensoft.ca



Copyright © 2025 Radiodetection Ltd. All rights reserved. Radiodetection is a subsidiary of SPX Technologies, Inc. Sensors & Software, NOGGIN, EKKO_Project, SmartCart, SmartTow, SmartSled, SmartChariot, SmartHandle, pulseEKKO are either trademarks or registered trademarks of Radiodetection in the United States and / or other countries. Juniper Systems® is a registered trademark of Juniper Systems, Inc. Geode is a recognized trademark of Juniper Systems, Inc. Due to a policy of continued development, we reserve the right to alter or amend any published specification without notice. This document may not be copied, reproduced, transmitted, modified or used, in whole or in part, without the prior written consent of Radiodetection Ltd.

90/NOGGIN-CATALOG/03

CONTACT US

