ROBOTICS & GPS

OPTICAL INSTRUMENTS | AUTOMATIC LEVELS | DIGITAL THEODOLITES
DATA COLLECTORS | GPS | SOFTWARE

CATALOG

TOPCON

Robotics & GPS Catalog

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Please note, not all products are available for dealers in some markets.

GM-50

Manual Total Station

- **Fast and accurate EDM**
- **Bluetooth® communications (optional)**
- **Advanced angle accuracy**
- **Long battery life – 14 hours**
- **Rugged, waterproof design with IP66 rating**
- **500 m long-range reflectorless measurement**
- **50,000 point internal memory**

GM-50 is perfect for

- **Field Surveying**
- **Site Work**

Advanced design with superior technology

The GM-50 Series was designed to deliver the very latest technological advantages, all in a small, sleek design. You'll appreciate the advantages from the very first measurement.

Accuracy for jobs large and small

Featuring a class-leading EDM unit, the GM-50 is able to measure up to 4,000 m at 1.5 mm + 2 ppm accuracy to standard prisms, and can measure in reflectorless mode up to 500 m at an incredible 2 mm + 2 ppm accuracy.

Versatile, economical solution

The GM-50 Series is smaller and lighter with increased storage capacity. Offered at an even more cost-efficient option than previous models, it provides your customers the perfect tool for entry-level site layout and surveying.

Bluetooth® communication

With integrated Bluetooth® capability, you can drive each field session cable-free to your hand held field computer.

Specifications		GM-50
Memory	USB	Up to 32 GB
	Internal	50,000 points
Distance Measurement	Reflectorless	Up to 500 m
	Prism EDM Range	Up to 4,000 m
	Measuring Time	Fine: 0.9 s Initial (1.7 s) Rapid: 0.7 s Initial (1.4 s)
	Tracking	0.4 s Initial (1.4 s)
Power and Electrical	Battery	Up to 14 hours in Eco mode
Accuracy	Prism EDM Accuracy	Prism Accuracy: 1.5 mm + 2 ppm
		Non-Prism Accuracy: 2.0 mm + 2 ppm (0.2 - 200 m)

LN-150

Layout Navigator, Robotic Total Station

- **Rugged, compact design**
- **Easy setup and operation**
- **Advanced 3D measuring and layout**
- **Easy to perform as-built checks**

Versatility

The first time you see it, you know it's unlike anything you've experienced before. Everything about the LN-150, from the advanced technology inside, to its clean and innovative design, is a game-changer for layout. With our time-proven and robotic total station technologies, the instrument is easy to use, without sacrificing the accuracy and versatility needed for all types of construction layout.

Single-button self-leveling

With the press of just one button, the LN-150 automatically self-levels and is ready for action. Pair it with a hand-held, touchscreen controller and you are ready to go to work.

3D layout tool

The LN-150 is a compact, self-leveling, easy-to-setup 3D layout tool designed for construction applications. Use the LN-150 in place of traditional methods such as tapes or other layout tools. Compact, rugged and lightweight, the LN-150 is ideal for construction layout and as-builts.

Building Information Modeling (BIM)

Maintain coordination throughout your projects. Knowing what was done before and working from the same design plan is critical to keeping on schedule and avoiding costly collisions. With our BIM solutions, you stay connected to the same design.

LN-150 is perfect for::

- **Field Surveying**
- **Site Work**
- **Layout**

Specifications		LN-150
Angle Measurement	Horizontal Angle	360°
	Vertical Angle	+55° to -30°
Distance Measurement	Prism Tracking Range	130 m
	Accuracy	±3 mm
Auto Level	Leveling Range	6°
Tilt Angle	Compensation	12'
Communications	Wi-Fi	802.11 b/g/n
	Bluetooth®	Class 1 LongLink™
Physical and Environmental	Dimensions	185 x 198 x 332 mm
	Dust/Water Rating	IP65
	Operating Temperature	-20°C to 50°C
	Laser Plummet	Yes

DT-300 Series

Advanced Digital Theodolite

- **High-accuracy (5”, 7” and 9” models) measurements**
- **Ultra-rugged IP66 dust and heavy rain protection**
- **Compact and lightweight**
- **Long-lasting Li-ion or AA battery life**
- **Easy-to-use LCD backlit display**
- **Precise laser pointer guidance**
- **Embedded tilt sensor for 5” and 7” models**

Power, savings, performance

This lightweight compact alignment and angular measurement device boasts up to 30 working days of power, the highest waterproof and dust protection, and convenient high-precision laser guidance.

Work fast, with precision

With our DT-300, you'll be up and working fast, thanks to its simple interface and large, easy-to-see backlit LCD. An optical plummet makes setup over a control point easy, and a tilt sensor provides ±3 minute angle correction.

With a range of angular accuracies available, we offer the precision, durability, and advanced technology you need to complete your work with confidence and right on schedule.

Available Models:

- **DT-305/PS**
- **DT-307/PS**
- **DT-309G/PS**
- **DT-305L/PS**
- **DT-307L/PS**
- **DT-309LG/PS**

Specifications		DT-300
Telescope	Objective lens	45 mm
	Magnification	30x / 26x (9")
	Laser Pointer, class	Class 2
Angle Accuracy		2", 5", 7", 9"
Display		2 sides / 1 side (9")
Plummet		Optical
Data Output		RS-232C
Compensator	Tilt sensor	1 Axis (2", 5", 7")
	Plate level	40" / 2 mm
	Circular level	10' / 2 mm
Water Protection		IP66
Operating time	Theodolite only	4x AA, ~ 230 hours (Optional Li-ion: BDC71)
Operating Temperature		-20ºC to 50ºC
Dimensions (d x w x h)		173 x 181 x 318 mm
Weight		4.1 kg

AT-B Series

Automatic Levels

- **Three models - 32x, 28x, and 24x magnifications**
- **Ultra-short 20 cm focusing**
- **All-weather dependability**
- **±5 Degrees self-leveling range**
- **Clampless, endless fine horizontal adjustments**

Rapid, stable, and durable compensator

The compensator of the AT-B Series incorporates four suspension wires made of super-high-tensile metal, which features a minimal thermal expansion coefficient — providing unmatched durability and accuracy. The finely tuned magnetic damping system quickly levels and stabilizes the line of sight despite the fine vibrations present when working near heavy equipment or busy roadways.

Horizontal circle for measurement

Horizontal angles can be directly read in 1 degree or 1 gon units. The free rotation feature allows you to read any angle from zero. The circle is covered for protection against dirt and scratches and the readout window is located below the eyepiece for quick reference.

Short minimum focus

The AT-B Series can focus on objects 20 cm in front of the telescope. This feature dramatically facilitates working in confined spaces.

All-weather dependability

With an IPX6 rating, the instrument is protected against powerful water jets from all directions, meaning the AT-B Series withstands a sudden shower or torrential rainfall. The advanced protection design also deters clouding or condensation inside the telescope.

Available Models:

- **AT-B2**
- **AT-B3A**
- **AT-B4A**

Specifications	AT-B2	AT-B3A	AT-B4A
Magnification	32x	28x	24x
Field of View	1°20’	1°25’	1°25’
Min. Focus from center of the instrument	0.3 m		
Image	Erect		
Stadia	Yes (1:100)		
Focusing Knob	2-speed	1-speed	1-speed
Setting Accuracy	0.3 in.	0.5 in.	0.5 in.
Working Range	±15 ft.	±15 ft.	±15 ft.
Dust/Water Rating	IPX6 (IEC 60529:2001)		
Operating Temperature	-20ºC to 50ºC		
Size	122 x 215 x 140 mm	122 x 214 x 140 mm	
Weight	1.85 kg	1.5 kg	

FC-6000

Field Computer

- **Sunlight-readable 7 in. display**
- **Intel® Quad-Core Pentium N4200 Processor**
- **MIL-STD-810G and IP68 certified**
- **Windows® 10 Pro operating system**
- **8 MP rear camera, 2 MP front camera**
- **Integrated 4G LTE cellular module (optional)**

Multiple technologies deliver power and control

Starting with its handy 7-inch display specifically designed for visibility in direct sunlight, the FC-6000 field computer is built with your productivity in mind. When the day's weather throws you a new challenge, stay productive and in control using fingertips, gloves, or a small, tipped stylus optically bonded to increase sensitivity even while working in wet conditions.

Ruggedized and reliable

In addition to a field-ready IP68 environmental rating, the unit is protected against dust and waterproof at a one-meter depth for up to two hours. The FC-6000 is independently certified as MIL-STD-810G, capable of operating in temperatures from -20°C to 50°C (-4°F to 122°F).

Fast processing power

This unit is built for speed with an Intel® Quad-Core Pentium N4200 Processor that easily drives any Topcon software and is ready to work with your large design files. It is ideal for grade checking with Pocket 3D and survey-related projects using MAGNET® Field data collection software.

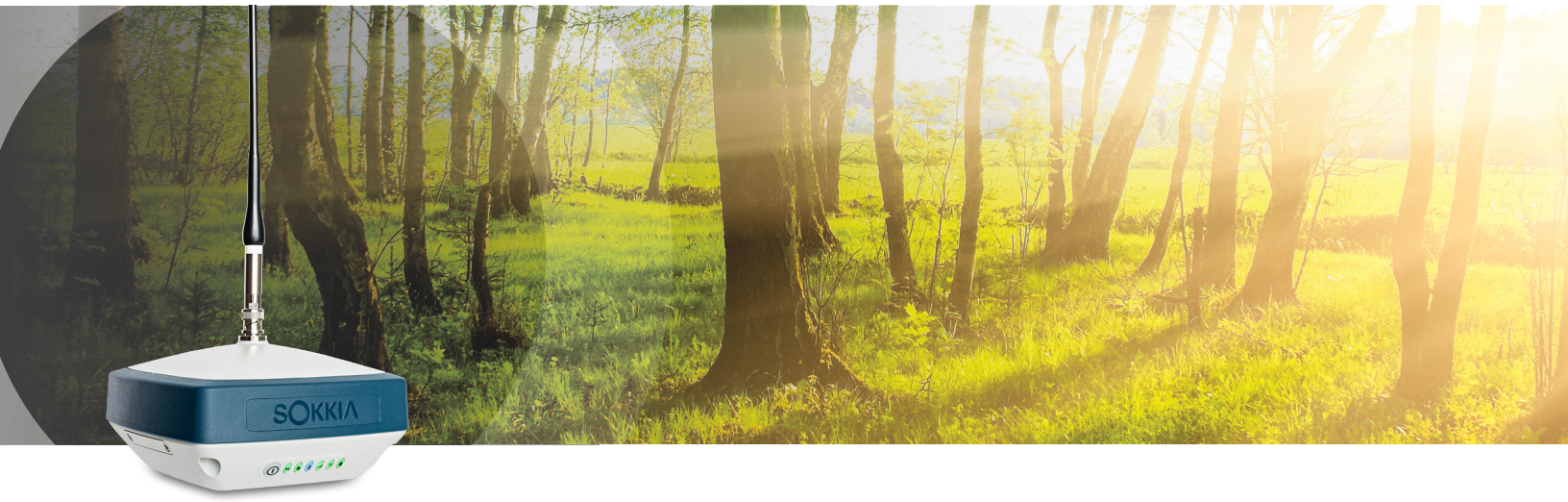
FC-6000 is perfect for:

- **Field Surveying**
- **Layout**
- **Construction Verification**
- **Forestry**
- **Utilities**
- **Forensics**

Specifications		FC-6000
Hardware	CPU	Intel® Quad-Core Pentium N4200 Processor 128GB or optional 256GB eMMC Storage
	OS	Window 10 Pro
	Memory	8GB LPDDR4 RAM
	Display	7 in. LCD touch screen, Wide XGA at 1280 x 800
	Camera	Rear: 8 megapixel with LED Illumination Front: 2 megapixel
Wireless Connectivity	Bluetooth®	LongLink™ Bluetooth technology V5.0, Class 1.5, BLE support
	Wi-Fi	802.11 a/b/g/n, 2.4 GHz and 5 GHz
	Cellular (optional)	Internal GSM 4G LTE
Environmental	Dust/Water Rating	IP68 certified
	Operating Temp	-20ºC to 50ºC -4ºF to 122ºF
	Weight	680 g (1.5 lbs.) without swappable battery

GRX3

GNSS Receiver



- **Sokkia TILT technology**
- **L Band ready technology**
- **226 Universal Tracking Channels™ covering all modernized signals (GPS, GLONASS, Galileo, BeiDou, IRNSS, QZSS, SBAS)**
- **Integrated 400 MHz UHF and SiteComm™ radios**
- **RTK and static survey operations**
- **Fusion Positioning™ technology automated workflow**
- **IP67 rated**

Multiple wireless technologies

The most commonly used wireless technologies can be integrated into the GRX3 receiver. Digital UHF, Network RTK and SiteComm™.

Maximum versatility

Utilizing full wireless connectivity and no voice feedback, the GRX3 enables both RTK and network RTK technologies. Using the internal digital UHF, it can be operated as both a private RTK base and RTK rover.

Stay in control

With the built in internal Bluetooth® capability, the GRX3 allows you the freedom to choose your field controller model and software. Whether it's a small palmed sized device, a larger handheld, or even a field laptop, the GRX3 is ready to connect.

Ready for the field

The GRX3's magnesium alloy body can handle even the toughest job site conditions. It is compact, watertight, and rugged with IP67 rated dust and water protection.

Specifications	GRX3
GNSS Tracking	
Channel Count	226 with patented Universal Tracking Channels technology
Signal	
GPS Signals GLONASS BeiDou Galileo SBAS QZSS	L1 C/A, L1C, L2P(Y), L2C, L5 L1 C/A, L1P, L2 C/A, L2P, L3C B1, B2 E1, E5a, Alt-BOC L1 C/A, L5 WAAS/MSAS/EGNOS/GAGAN L1 C/A, L1C, L1-SAIF, L2C, L5
Positioning Performance	
Static/Fast Static	H: 3 mm + 0.4 ppm V: 5 mm + 0.5 ppm*
Memory	Internal non-removable 8 GB
Environmental	
Dust/Water Rating	IP67
Physical	
Dimensions (w x h x d)	150 x 100 x 150 mm
Operating Time	RX mode -10 hours, TX mode 1W - 6 hours

GCX3

GNSS Receiver

- **All-in-view constellation GNSS receiver**
- **226 optimized satellite tracking channels**
- **Second-generation POST2™ (Precision Orbital Satellite Technology) integrated antenna – robust signal tracking even around interference sources**
- **Compact, lightweight, rugged and cable-free design**
- **Ideal network RTK rover**
- **Wireless, multi-channel long-range Bluetooth® technology**

Small but mighty

The GCX3 is an ultra-lightweight, compact solution that minimizes heft on the range pole. You get maximum mobility and ease of use in the field. But do not let the size fool you — the GCX3 antenna performance in obstructed canopy environments outperforms other traditional antenna technology.

Advanced technologies

Built with leading-edge technology, the GCX3 brings you the best in GNSS RTK and static data collection. The POST2™ integrated antenna delivers first-class performance. Adding BeiDou, Galileo, SBAS, QZSS, and GAGAN satellite tracking in addition to GPS and GLONASS ensures the best positioning availability.

Ultimate versatility

The GCX3 interface is based on an open-source architecture. This means you are not limited to specific software for your field controller. While the GCX3 standard system includes suggested software, it is open to fit your workflow.

Work your way

Providing flexibility in a variety of ways for static or RTK data collection, the GCX3 easily adapts to nearly any application. A pair of GCX3 receivers can be used as a base and rover using wireless multi-channel long-range Bluetooth® technology RTK corrections. When combined with a cellular-enabled field controller, the GCX3 also performs as an ideal precision network RTK rover.

Specifications	GCX3
Tracking Capability	
Number of Channels	226 channels
Tracked Signals	GPS, GLONASS, BeiDou, Galileo, SBAS and QZSS
Antenna Type	Integrated antenna
Positioning Accuracy	
Static/Fast Static	H: 3 mm + 0.4 ppm, V: 5 mm + 0.6 ppm
Precision Static	H: 3 mm + 0.1 ppm, V: 3.5 mm + 0.4 ppm
Wireless Communication	
Bluetooth® Modem	v2.1 + EDR
General	
Dust/Water Rating	IP67
Dimensions (w x h x l)	47 x 197 x 47 mm

NET AXII Series

3D Monitoring Stations

- **Precise angle accuracies 0.5” (NET05 AXII) / 1” (NET1 AXII)**
- **1” Auto-pointing accuracy**
- **Remote control through online PC**
- **Exclusive reflector prescan technology**
- **Enforced durability for long-term deformation / monitoring applications**

Ultra-precise distance measurement

These fully robotic monitoring stations offer superior performance compared to conventional systems that simply lock on to the nearest targets. The NET AXII Series excels at precision-intensive tasks such as monitoring, bridge construction, and other highly detailed engineering projects.

For monitoring

The NET AXII Series provides superior measuring precision for high-precision monitoring applications and can be utilized to configure a high-precision monitoring system.

For industrial measurement

Achieve sub-millimeter accuracy using the NET05 AXII and reflective sheet targets. It’s excellent for measuring the shape and alignment of large-scale structures, such as various plants and bridges, and precise measurement of ships, railroad cars and airplanes.

For first order survey

You get high-precision angle accuracy (NET05 AXII: 0.5”, NET1 AXII: 1”), which can be applied for a wide range of precise measurements. The high-precision 3D station is equipped with an automatic tracking system and can be configured by remote control.

Available Models:

- **NET05 AXII**
- **NET1 AXII**

Specifications	NET05 AXII	NET1 AXII
Telescope		
Magnification / Resolving power	30x / 2.5"	
Angle Measurement		
Display Resolution (selectable)	0.1" / 0.5" (0.00002 / 0.0001 gon, 0.0005 / 0.002 mil)	
Accuracy (ISO 17123-3:2001)	0.5"	1"
General		
Dust/Water Rating / Operating Temperature	IP65 (IEC 60529:2001) / -20ºC to 50ºC (-4ºF to 122ºF)	
Size with Handle (w x d x h)	Single face: 230 x 196 x 393 mm	
Power Supply		
BDC70 standard battery	7.2V, 5.2Ah / Li-ion rechargeable battery	
Operating time (20ºC)	Approx. 4 hours	

iX-1200/600 Series

Robotic Total Stations

- **10 Hz update rates for faster more efficient staking**
- **150°/sec turning speed for exceptional productivity**
- **30% smaller and lighter than any other Sokkia series robotic instrument**
- **GNSS hybrid ready so you can handle any job site**
- **Five-year UltraSonic motor warranty**

The ultimate total station

With the iX-1200/iX-600, you get the efficiency of a single-operator robotic system, the power of long-range reflectorless measurements, and the versatility of Fusion Positioning™, all in your choice of 1", 3" or 5" iX-1200 models or 2", 3" or 5" iX-600 models.

Ultra powerful

Improved, intelligent Ultrasonic motor control provides smoother operation with less wear and tear. Ideal for survey or vertical construction, the solution is designed to stake or layout more points in less time even in challenging conditions.

Ultra accurate

UltraTrac™ prism tracking utilizes optical sensing combined with high-speed Ultrasonic motor control. Whether working at a distance or up close, the instrument maintains prism lock making you more productive in any environment.

Ultra productive

Combine and conquer with our hybrid solutions that utilize both GNSS and robotics so you can capture the shot, regardless of tree cover, loss of line of sight, or hard-to-reach points. Tackle any project in a fraction of the time.

Available Models:

- **iX-1200**
- **iX-600**

Specifications	iX-1200/600
Angle Measurement	
Horizontal and vertical circles type	Rotary absolute encoder
Angle Accuracy (ISO 17123-3:2001)	
iX-1201 iX-602	1" (0.0003 gon/0.005 mil) 2" (0.0006 gon/0.010 mil)
Measuring Range	
Prism-2 X 1	iX-1200 Series: 1.3 to 6,000 m (19,685 ft.) iX-600 Series: 1.3 to 4,000 m (13,123 ft.)
Environmental	
Dust/Water Rating	IP65 (IEC 60529:2001)
Instrument height	192 mm from tribrach mounting surface
Size with handle (w x d x h)	212 x 172 x 355 mm
Weight (with handle/battery)	5.8 kg

FX-200 Series

Manual Total Station

- **Lightweight, compact body**
- **RED-tech technology reflectorless EDM**
- **Long-range Bluetooth® technology**
- **Advanced angle measurement system**
- **Long-lasting battery**

Precise positioning

The FX Series features our best-in-class absolute encoders that provide long-term reliability in any job site condition. Dual-axis compensator ensures stable measurements even when set up on uneven terrain. Our traditional motion clamp and tangent screw are employed to ensure stable angle measurement.

On-board control

Increase your productivity with the Windows® on-board operating system and touch screen computer. The large, bright screen provides enough resolution to view points, lines, and icons so you can see and react quicker. Move your projects along faster by doing point collection, description entry, and on-screen calculations right on the instrument.

Long-range flexibility

For stakeout and other tasks where being at the prism pole with a field controller is critical, the FX Series features Bluetooth® Class 1.5 wireless technology. All FX data is instantly available on your Bluetooth® equipped controller.

Available Models:

- **FX-201**
- **FX-203**
- **FX-205**

Specifications		FX-201	FX-203	FX-205
Angle Measurement				
Display resolution		0.5" / 1"	1" / 5"	
Accuracy (ISO 17123-3:2001)		1" (0.3 mgon)	3" (1.0 mgon)	5" (1.5 mgon)
Distance Measurement				
Measuring range (under average conditions)		Reflectorless: Up to 1000 m (3,280 ft.)		
Distance accuracy (ISO 17123-4:2001) (D=measuring distance in mm)		Reflectorless: (3 + 2 ppm x D) mm (0.3 to 200 m) Reflective sheet: (2 + 2 ppm x D) mm Standard prism: (1.5 + 2 ppm x D) mm		
General				
Dust/Water Rating		IP66 (IEC 60529:2001)		
Operating temperature	Standard models Low temp. models	-20 to 60°C (-4 to 140°F) -30 to 50°C (-22 to 122°F)		
Size with handle (w x d x h)	Two displays One display (5" model)	191 x 190 x 348 mm 191 x 174 x 348 mm		
Weight with battery and tribrach		Approx. 5.7 kg (12.3 lb.)		

iM-100 Series

Intelligent Measurement Total Station

- **Fast, accurate, and powerful EDM**
- **Dual-axis compensation**
- **Waterproof IP66 rating**
- **Up to 28 hours in battery life**

Big power, small package

Easy-to-use, highly accurate, rugged, and reliable the iM-100 manual total station is perfect for entry-level site layout and surveying. The iM-100 is built to be your hardest worker, made to withstand even the toughest conditions and provide up to 28 hours of battery life.

High-end performance

Featuring a top line EDM, the iM-100 is fast, accurate, and powerful. It has 1.5 mm / 2 ppm accuracy and can measure up to 5,000 meters to standard prisms, and in reflectorless mode measures up to 800 meters at an incredible 2.0 mm + 2 ppm accuracy.

Precise positioning

Dual-axis compensation ensures stable measurements even on rough terrain. The compensator automatically corrects both horizontal and vertical angles and allows for more accurate instrument setups and measurements.

Ready for the field

In addition to an IP66 certification, the iM-100 is guaranteed to protect against dust and be waterproof up to one meter. It comes in a regular model which can operate in temperatures ranging from -20ºC to 60ºC, and a low-temperature model that can handle -35ºC to 50ºC.

Available Models:

- **iM-101**
- **iM-102**
- **iM-103**
- **iM-105**

Specifications	iM-101	iM-102	iM-103	iM-105
Telescope				
Magnification / Resolving Power	30x / 2.5"			
Distance Measurement				
Display Resolution	0.5" / 1"	1" / 5"		
Accuracy (ISO 17123-3:2001)	1"	2"	3"	5"
General				
Dust/Water Rating	IP66 (IEC 60529:2001)			
Operating temperature	-20 to 60°C (-4 to 140°F)			
Size with handle (w x d x h)	Control panel on both faces: 183 x 181 x 348 mm Control panel single face: 183 x 174 x 348 mm			
Weight with battery and tribrach	Approx. 5.3 kg			

iM-50 Series

Intelligent Measurement Total Station

- **Integrated construction and survey application software**
- **Fast, accurate, and powerful EDM**
- **Reflectorless up to 500 m**
- **Advanced angle accuracy (2” or 5”)**

Outstanding performance

Featuring an advanced EDM, the iM-50 Series is fast, accurate, and powerful. In reflectorless mode, it measures up to 500 m at an incredible 2 mm + 2 ppm accuracy, and has 1.5 mm + 2 ppm accuracy when measuring up to 4,000 m to standard prisms.

Fast and powerful EDM

The iM-50 Series gives you rapid and correct pinpointing with phase shift technology. The ultra-narrow EDM beam can precisely measure walls, corners, manholes on the road surface, and even chain-link fences and tree branches. You get a rapid distance measurement of 0.9 seconds regardless of the object.

Rugged and waterproof

With an IP66 certification, the iM-50 Series is guaranteed to protect against dust and be waterproof up to one meter. Its rugged metal chassis and heavy-duty handle stand up to even the toughest job sites. Truly an all-weather solution, the iM-50 Series can operate in temperatures ranging from -20ºC to 60ºC.

Available Models:

- **iM-52**
- **iM-55**

Specifications	iM-52	iM-55
Angle Measurement		
Minimum Display (selectable)	1"/5" (0.0002 / 0.001 gon, 0.005 / 0.02 mil)	
Distance Measurement		
Accuracy (ISO 17123-4:2001) (D=measuring distance in mm)	Reflectorless: (2 + 2 ppm x D) mm Reflective sheet: (2 + 2 ppm x D) mm Prism: (1.5 + 2 ppm x D) mm	
General		
Dust / Water Rating / Operating temperature	IP66 (IEC 60529:2001) / -20 to 60ºC (-4 to 140ºF)	
Size with handle (w x d x h)	183 x 181 x 348 mm (On both faces)	183 x 174 x 348 mm (On single face)
Instrument height	192.5 mm from tribrach mounting surface	
Weight with battery and tribrach	Approx. 5.1 kg (11.3 lb.)	
Power Supply		
Battery	Li-ion rechargeable battery BDC46C	

DT50 Series

Digital Theodolites

- **2.5” – unsurpassed telescope resolving power**
- **IP66 – industry’s highest dust/ water protection**
- **Absolute encoders**
- **Lightweight**
- **Standard LR6/AA batteries**
- **Up to 170 hours of operating time**

Durable, lightweight performance

The DT50 is a lightweight, compact alignment and angular measurement device, with up to 30 working days of power, the highest waterproof and dust protection, and convenient high-precision laser guidance.

Precision and Speed

Thanks to its simple interface and large, easy-to-see backlit LCD, you'll be up and working fast. An optical plummet makes set up over a control point easy, and a tilt sensor provides ±3 minute angle correction.

With a broad range of angular accuracies available, this Sokkia theodolite delivers precision, durability, and advanced technology to help you finish the job with confidence.

Available Models:

- **DT-550/PS**
- **DT-750/PS**
- **DT-950G/PS**
- **DT-550L/PS**
- **DT-750L/PS**
- **DT-950LG/PS**

Specifications	Digital Theodolites DT50	Laser Digital Theodolites DT50L
Telescope		
Objective Lens	45 mm	
Magnification	30x / 26x (9")	
Laser Pointer, Class	Class 2	
Angle Measurement		
Accuracy (ISO 17123-3: 2001)	5”, 7”, 9”	
Display		
Unit	2 sides for 5" and 7" model / 1 side for 9" model	
Sensitivity of Levels		
Circular Level	10" / 2 mm	
Plate Level	30' / 2 mm	
General		
Operating Time	Theodolite only: 4x AA, ~ 250 hours (Optical Li-ion: BDC71)	
Operating Temperature	-20ºC to 50ºC	
Size with handle (w x d x h)	5” and 7” Models: 173 x 181 x 318 mm 9” Models: 173 x 174 x 318 mm	
Weight (with batteries and battery holder)	5” and 7” Models: 4.1 kg (9.04 lb.) 9” Models: 4.0 kg (8.82 lb.)	

SDL Series

Digital Levels

- **High-speed measurement**
- **Consistent performance**
- **Water and shock resistant**
- **2000-point internal memory**
- **Li-ion power system for up to 8.5 hours of continuous operation**

Available Models:

- **SDL30**
- **SDL50**

Make measurements quick, easy, and accurate

The SDL30/SDL50 is an accurate, dependable digital level that combines user-friendly convenience with maximum functionality.

All you have to do is aim at the staff, adjust the focus, and then with a single touch of a key the SDL30/SDL50 accurately measures height and distance. The results are easy to see on the LCD display.

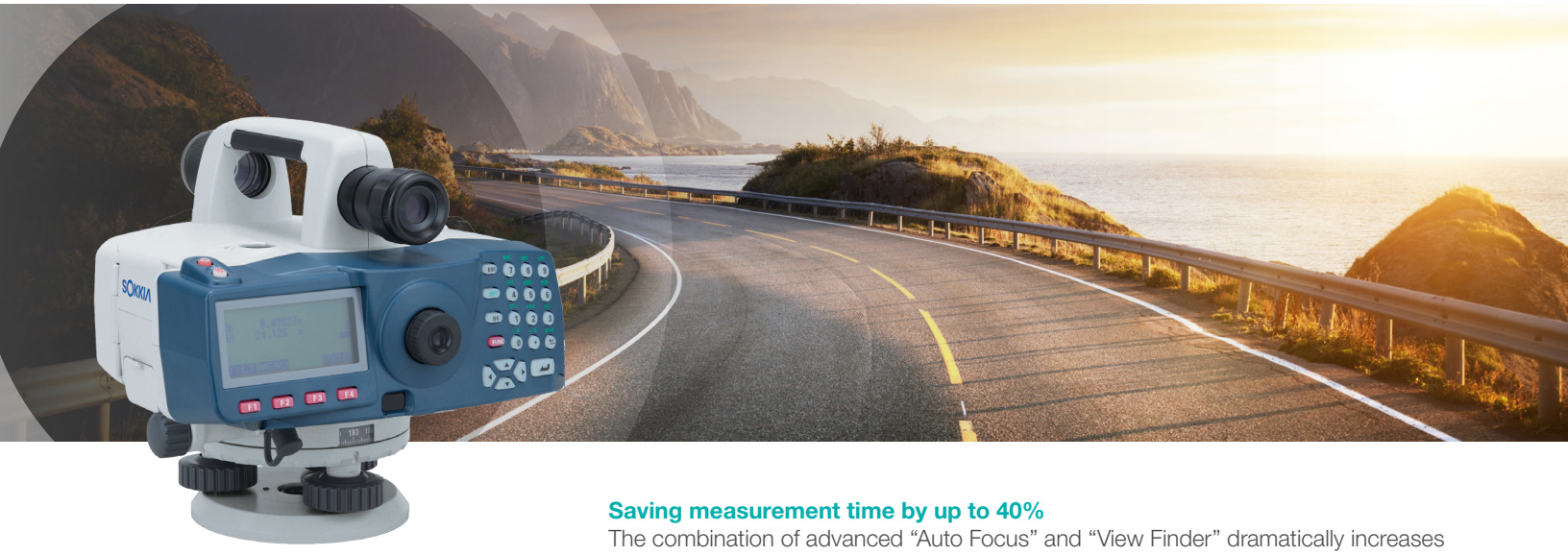
Fast measurements

Aim, focus and press a key. Height and distance are simultaneously measured in 2.5 seconds, 20 percent faster than ordinary digital levels.

Specifications			SDL30	SDL50
Distance Measurement				
Height Accuracy (ISO 17123-2)	Electronic	BIS30A staff	0.4 mm (0.016 in.)	0.6 mm (0.024 in.)
		BIS20/30 staffs	0.6 mm (0.024 in.)	0.8 mm (0.03 in.)
		BGS staffs	1.0 mm (0.04 in.)	1.5 mm (0.06 in.)
	Visual	BGS staffs	1.0 mm (0.04 in.)	2.0 mm (0.08 in.)
Distance Accuracy (D: measuring distance)	Electronic		<±10 mm (±0.4 in.) [D<=10 m (D<=33 ft.)]	
			<±0.1% x D [10<D<=50 m (33<D<=164 ft.)]	
			<±0.2% x D [50<D<=100 m (164<D<=328 ft.)]	
Measuring Range	Electronic		1.6 to 100 m (5.3 to 328 ft.)	
	Visual		from 1.5 m (5 ft.)	
Measuring Mode			Single / Repeat / Average / Tracking / Wave-and-Read	
Display Resolution	Height		0.0001/0.001/0.01 m (0.001/0.01/1 ft., 1/8 in.)	
	Distance		0.01/0.1 m (0.1/1 ft., 1 in.)	
General				
Water Protection			IPX4 (IEC60529:2001)	
Operating Temperature			-20 to 50°C (-4 to 122°F)	
Size (w x d x h)			158 x 257 x 182 mm (6.2 x 10.1 x 7.2 in.)	
Weight with Battery			2.4 kg (5.3 lb.)	
Standard Battery			BDC46B (Rechargeable Li-ion, 7.2V, 2.45Ah)	
Operating Time			Approx. 16 hours at 25°C (77°F)	

SDL1X

Digital Level



- **0.2 mm precision (ISO17123-2)**
- **Auto Focus for high-end digital level**
- **View Finder for quick sighting**
- **Remote Trigger for wireless operation**
- **Dual-axis Tilt Sensor that ensures precision**
- **SD card slot for data storage**
- **100 m (320 ft.) Bluetooth® wireless communication**
- **BIS30A staff with ±0.1 ppm/°C linear expansion coefficient**

Saving measurement time by up to 40%

The combination of advanced “Auto Focus” and “View Finder” dramatically increases measurement speed.

Measuring time — from sighting staff to completion of data storage — can be reduced by up to 40% compared to manual focus digital levels.

Seamless switching between Auto Focus and Manual

There is no need to switch the focusing mode; the trigger key operation automatically starts Auto Focus. Manual focusing is possible at any time by rotating the focusing knob that supersedes the Auto Focus.

Specifications		SDL1X
Distance Measurement		
Height Accuracy (ISO 17123-2)	Electronic	0.2 mm (0.008 in.)*2 with BIS30A staff 0.3 mm (0.012 in.) with BIS20/30 staffs 1.0 mm (0.04 in.) with BGS staffs
	Visual	1.0 mm (0.04 in.)
Distance Accuracy (D: measuring distance)	Electronic	<±10 mm (<±0.4 in.): up to 10 m (33 ft.) <±0.1% x D: to 50 m (to 164 ft.) <±0.2% x D: to 100 m (to 328 ft.)
C & R Correction		K=0.142 / 0.20 / none, selectable
Measuring Range	Electronic	1.6 to 100 m (5.3 to 328 ft.)
	Visual	from 1.5 m (5 ft.)
Measuring Mode		Single / Repeat / Average / Rapid-repeat
General		
Dust/Water Rating		IP54 (IEC60529:2001)
Operating Temperature		-20 to 50°C (-4 to 122°F)
Size (w x d x h)		226 x 260 x 200 mm (8.9 x 10.2 x 7.9 in.)
Weight with Battery		3.7 kg (8.2 lb.)
Power Supply	Input Voltage	7.2V DC (nominal)
	Standard Battery	BDC58 (Rechargeable Li-ion, 4.3Ah)
	Operating Time (at 20°C (68°F))	Approx. 12 hours w/o Auto Focus Approx. 12 hours w/ Auto Focus

B-Series

Automatic Levels

- **Tough and compact bodies sealed against water, humidity and dust**
- **Quick setup, easy sighting and superior durability against shock and vibration**
- **Exceptionally bright and sharp view**

Excellent performance under any condition

Get outstanding precision for all your leveling tasks. The B-Series levels incorporate the most accurate and reliable compensator available in the market today.

Fast, easy setup

A domed-head tripod makes setting up faster and easier even on inclined and uneven ground. The B-Series levels also fit flat-head tripods. The circular level can be seen on a pentaprism or plane mirror located beside the telescope eyepiece.

Excellent performance under any condition

Get outstanding precision for all your leveling tasks. The B-Series levels incorporate the most accurate and reliable compensator available in the market today.

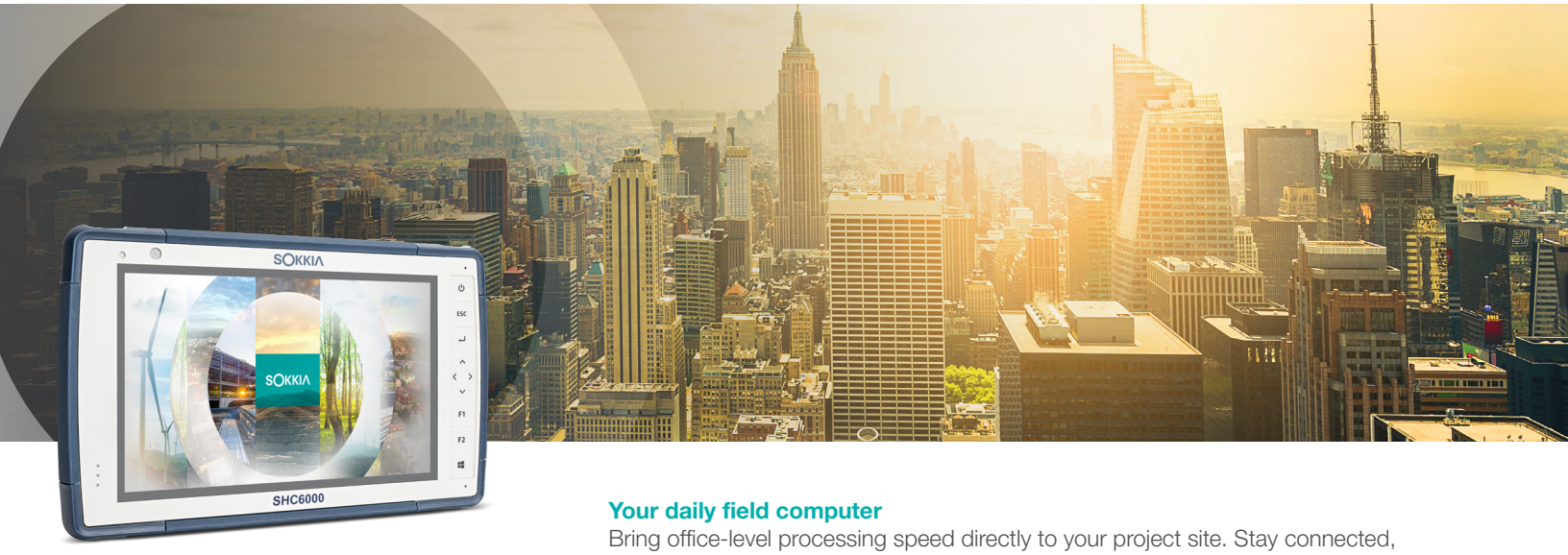
Available Models:

- **B20**
- **B30A**
- **B40A**

Specifications	B20	B30A	B40A
Telescope			
Length	215 mm	214 mm	
Magnification	32x	28x	24x
Object Aperture	42 mm	36 mm	32 mm
Resolving Power	3"	3.5"	4"
Field of View (at 100 m)	1°20' (2.3 m)	1°25' (2.5 m)	
Circular Level			
Sensitivity	10' / 2 mm		
Mirror	Pentaprism	Plane mirror	
Horizontal Circle			
Diameter	103 mm		
Graduations	1° / 1 gon		
General			
Horizontal Motion Drive	Clampless, endless, double-sided knobs		
Water Protection	IPX6 (IEC 60529:2001)		
Operating Temperature	-20ºC to 50ºC		
Size	130 x 215 x 140 mm	130 x 214 x 140 mm	130 x 214 x 135 mm
Weight	1.85 kg	1.5 kg	

SHC6000

Field Computer



- **Sunlight-readable 7-inch display**
- **Intel® Quad-Core Pentium N4200 Processor**
- **MIL-STD 810G and IP68 certified**
- **Windows® 10 operating system**
- **8 MP rear camera, 2 MP front camera**
- **Integrated 4G LTE cellular module (optional)**

Your daily field computer

Bring office-level processing speed directly to your project site. Stay connected, productive, and in control with the SHC6000 field computer.

Like all of our solutions, you can customize it to meet your needs and create your own workflows.

Stay connected

Bluetooth® and Wi-Fi communication come standard on the SHC6000 and are ideal options to connect and drive any Sokkia GNSS receiver or optical total station out to distances of 500 meters. Plus, using local Wi-Fi, you can upload the day's work before leaving the project site – cutting down on return trips to the office.

Specifications	SHC6000
Hardware	
Processor	Intel® Quad-Core Pentium N4200 Processor
Operating System	Microsoft® Windows 10
Memory and Data Storage	8GB LPDDR4 RAM | User accessible SD Slot
Display	7-inch screen, Wide XGA at 1280 x 800
GNSS	Type: uBlox NEO M8M
Camera	Rear: 8 MP with LED Illumination | Front: 2 MP
Communication	
Bluetooth®	LongLink™ Bluetooth technology, Class 1.5, BLE support
Wi-Fi	802.11a/b/g/n, 2.4 GHz and 5 GHz
Cellular Connectivity (optional)	Internal GSM 4G LTE modem
Environmental	
Dust/Water Rating	IP68 certified
Operating Temperature	-20°C to 50°C
Temperature Shock	MIL-STD 810G
MIL-STD 810G	Drop 4 ft. (1.2 m),vibration, humidity
Dimensions (l x w x h)	215 x 137 x 35 mm
Operating Time	Up to 15 hours (5 hours internal batteries, 10 hours with swappable batteries)

MAGNET

Field, Field Layout, Construct, and Office Solutions

Our software includes over 25 integrated software products. They are used to collect data, organize, and create deliverables:

- **MAGNET Field, Office, Enterprise software**
- **Scanning workflows**
- **Monitoring solutions**

We serve a large number of market segments with our precise positioning technology:

- **Silo “free” offering for trades like survey and construction or with third-party solutions**
- **Overall, it’s a collection of solutions that works better together and well with each other**

The engine to field productivity

MAGNET Field

MAGNET Field, the engine for our field-productivity package, is designed to accelerate productivity, increase accuracy and better connect project teams. The intuitive software is easy to learn and use and yet has the power to solve even the most complex positioning challenges. Surveyors and contractors alike use MAGNET Field to collect data points, stake out road and site projects, lay out building components and perform land surveys. Running MAGNET Field data collection software on a ruggedized Topcon or Sokkia field computer brings field-ready capabilities directly to your job site.

MAGNET Field Layout

This data-collection software is designed specifically for quick and accurate layout and construction verification. With in-the-field plan and dimensional entries, you can move from paper plan or 3D model to building layout faster than ever. MAGNET Field Layout also includes scanning capabilities for use with construction-verification workflows.

MAGNET Construct

MAGNET Construct is a cloud-connected, field-controller software for positioning layout and as-built applications utilizing robotic total stations and GNSS devices. This mobile app provides a streamlined workflow with graphical, real-time positioning to any point, line, surface, or feature at your project site. You can use either a Topcon ruggedized controller or a mobile device.

MAGNET Office

Stay in charge of your project data set. This office-software companion to our field-productivity solutions handles the data import-and-export needs and provides project insights for better site management and improved profitability. You can optimize digital-infrastructure workflows including machine-control models, material takeoffs, final survey deliverables, point-layout files, paving-resurfacing design, and location-based project scheduling for mass-haul earthmoving.

www.topconpositioning.com