

	Instinct Crossover	Instinct Crossover Solar	Instinct 2	Instinct 2 Solar
General				
Lens Material	Chemically strengthened glass	Power Glass™	Chemically strengthened glass	Power Glass™
Bezel Material	fiber-reinforced polymer/ss	fiber-reinforced polymer/ss	Fibre-reinforced polymer	Fibre-reinforced polymer
Case material	Fiber-reinforced polymer	Fiber-reinforced polymer	Fibre-reinforced polymer	Fibre-reinforced polymer
QuickFit™ watch band compatible	yes (22 mm)	yes (22 mm)	Yes (22 mm)	Yes (22 mm)
Strap material	Silicone	Silicone	Silicone	Silicone
Physical size	45.0 x 45.0 x 16.2 mm	45.0 x 45.0 x 16.2 mm	45 x 45 x 14.50 mm	45 x 45 x 14.50 mm
Display Size	23 x 23 mm	23 x 23 mm	23 x 23 mm	23 x 23 mm
Display Resolution	176 x 176 pixels	176 x 176 pixels	176 x 176 pixels	176 x 176 pixels
Display Type	Monochrome, sunlight-visible, transfective memory-in-pixel (MIP)	Monochrome, sunlight-visible, transfective memory-in-pixel (MIP)	Monochrome, sunlight-visible, transfective memory-in-pixel (MIP)	Monochrome, sunlight-visible, transfective memory-in-pixel (MIP)
Weight	65 g	65 g	52 g	53 g
Water rating	10 ATM	10 ATM	10 ATM	10 ATM
Battery life				
Smartwatch	Up to 28 days	Up to 70 days with solar*	Up to 28 days	Unlimited with solar*
Battery Saver Watch Mode	Up to 71 days	Unlimited with solar*	Up to 65 days	Unlimited with solar*
GPS Only	Up to 25 hours	Up to 31 hours with solar*	Up to 30 hours	Up to 8 hours with solar*
Max Battery GPS	Up to 111 hours	Up to 553 hours with solar*	Up to 70 hours	Up to 7370 hours with solar*
Expedition GPS	Up to 40 days	Up to 327 days with solar*	Up to 32 days	Unlimited with solar*
	* Solar charging, assuming all-day wear with 3 hours per day outside in 50,000 lux conditions			
Charging method	Garmin proprietary plug charger	Garmin proprietary plug charger	Garmin proprietary plug charger	Garmin proprietary plug charger
Memory/History	64 MB	64 MB	32 MB	32 MB
Clock Features				
Time/date	yes	yes	yes	yes
GPS Time Sync	yes	yes	yes	yes
Automatic daylight saving time	yes	yes	yes	yes
Alarm clock	yes	yes	yes	yes
Timer	yes	yes	yes	yes
Stopwatch	yes	yes	yes	yes
Analog hands	yes	yes	-	-
Sunrise/sunset times	yes	yes	yes	yes
Health Monitoring				
Wrist-based heart rate	yes	yes	yes	yes
Daily resting heart rate	yes	yes	yes	yes
Abnormal heart rate alerts	yes (high and low)	yes (high and low)	yes (high and low)	yes (high and low)
Respiration rate (24x7)	yes	yes	yes	yes
Pulse Ox blood oxygen saturation	yes	yes	yes	yes
Fitness age	yes	yes	yes	yes
Body Battery™ energy monitor	yes	yes	yes	yes
All-day stress	yes	yes	yes	yes
Relaxation breathing timer	yes	yes	yes	yes
Sleep	yes	yes	yes	yes
Sleep score and insights	yes	yes	yes	yes
Hydration	yes	yes	yes	yes
Women's health	yes	yes	yes	yes
Health snapshot	yes	yes	yes	yes
Sensors				
GPS	yes	yes	yes	yes
GLONASS	yes	yes	yes	yes
Galileo	yes	yes	yes	yes
Garmin Elevate™ wrist heart rate	yes	yes	yes	yes
Barometric altimeter	yes	yes	yes	yes
Compass	yes	yes	yes	yes
Accelerometer	yes	yes	yes	yes
Thermometer	yes	yes	yes	yes
Pulse Ox Blood Oxygen Saturation	yes	yes	yes	yes
Daily Smart Features				
Connectivity	Bluetooth®, ANT+®	Bluetooth®, ANT+®	Bluetooth®, ANT+®	Bluetooth®, ANT+®
Connect IQ™	yes	yes	yes	yes
Smart Notifications	yes	yes	yes	yes
Text response/reject phone call with text (Android™ only)	yes	yes	yes	yes
Calendar	yes	yes	yes	yes
Weather	yes	yes	yes	yes
Realtime settings sync with Garmin Connect™ mobile	yes	yes	yes	yes
Battery saver	yes	yes	yes	yes
Controls smartphone music	yes	yes	yes	yes
Find My Phone	yes	yes	yes	yes
Find My Watch	yes	yes	yes	yes
VIRB® Remote	yes	yes	yes	yes
Smartphone compatibility	yes	yes	yes	yes
Pairs with Garmin Golf app	yes	yes	yes	yes
Pairs with Garmin Connect™ Mobile	yes	yes	yes	yes
Stocks	Yes (optional Connect IQ app)	Yes (optional Connect IQ app)	-	-
Garmin Pay™	yes	yes	-	yes
Safety and Tracking Features				
LiveTrack	yes	yes	yes	yes
Live Event Sharing	yes	yes	-	-
Incident Detection - select activities	yes	yes	yes	yes
Assistance	yes	yes	yes	yes
Tactical Features				

Dual grid coordinates	yes	yes	yes	yes
Activity Tracking Features				
Step counter	yes	yes	yes	yes
Move bar	yes	yes	yes	yes
Auto goal	yes	yes	yes	yes
Calories burned	yes	yes	yes	yes
Floors climbed	yes	yes	yes	yes
Distance traveled	yes	yes	yes	yes
Intensity minutes	yes	yes	yes	yes
TrueUp™	yes	yes	yes	yes
Move IQ™	yes	yes	yes	yes
Garmin Connect™ Challenges app	Yes (optional Connect IQ app)	Yes (optional Connect IQ app)	Yes (optional Connect IQ app)	Yes (optional Connect IQ app)
Gym & Fitness Equipment				
Automatic rep counting	yes	yes	yes	yes
Cardio workouts	yes	yes	yes	yes
Available gym activity profiles	Strength, HIIT, Cardio and Elliptical Training, Stair Stepping, Floor Climbing, Indoor Rowing, Breathwork, Pilates, Yoga	Strength, HIIT, Cardio and Elliptical Training, Stair Stepping, Floor Climbing, Indoor Rowing, Breathwork, Pilates, Yoga	Strength, Cardio and Elliptical Training, HIIT, Stair Stepping, Floor Climbing, Indoor Rowing, and Yoga	Strength, Cardio and Elliptical Training, HIIT, Stair Stepping, Floor Climbing, Indoor Rowing, and Yoga
Strength workouts	yes	yes	yes	yes
HIIT workouts	yes	yes	yes	yes
Yoga workouts	yes	yes	yes	yes
Pilates workouts	yes	yes	yes	yes
Training, Planning and Analysis Features				
HR zones	yes	yes	yes	yes
HR alerts	yes	yes	yes	yes
HR calories	yes	yes	yes	yes
% HR max	yes	yes	yes	yes
% HRR	yes	yes	yes	yes
Recovery time	yes	yes	yes	yes
Auto max HR	yes	yes	yes	yes
HRV status	yes	yes	yes	yes
HR broadcast	yes (using ANT+)	yes (using ANT+)	yes (using ANT+)	yes (using ANT+)
Respiration rate (during exercise)	yes	yes	yes	yes
GPS speed and distance	yes	yes	yes	yes
Customizable data pages	yes	yes	yes	yes
Customizable activity profiles	yes	yes	yes	yes
Auto Pause®	yes	yes	yes	yes
Interval training	yes	yes	yes	yes
Advanced workouts	yes	yes	yes	yes
Downloadable training plans	yes	yes	yes	yes
Power Modes - customizable in-activity battery settings	yes	yes	yes	yes
HRM running pace and distance	yes	yes	yes	yes
Auto Lap®	yes	yes	yes	yes
Manual lap	yes	yes	yes	yes
Configurable lap alerts	yes	yes	yes	yes
Heat and altitude acclimation	yes	yes	yes	yes
VO2 Max (Run)	yes	yes	yes	yes
VO2 Max (Trail Run)	yes	yes	yes	yes
Training status	yes	yes	yes	yes
Training load	yes	yes	yes	yes
Training effect	yes	yes	yes	yes
Training effect (anaerobic)	yes	yes	yes	yes
Primary benefit	yes	yes	yes	yes
Improved recovery time	yes	yes	yes	yes
Daily suggested workouts	yes	yes	yes	yes
Custom alerts	yes	yes	yes	yes
Audio prompts	yes	yes	yes	yes
Finish time	yes	yes	yes	yes
Virtual Partner	yes	yes	yes	yes
Race an Activity	yes	yes	yes	yes
Auto multisport activities	yes	yes	yes	yes
Manual multisport activities	yes	yes	yes	yes
Course guidance	yes	yes	yes	yes
Touch and/or button lock	yes	yes	yes	yes
Hot keys	yes	yes	yes	yes
Auto scroll	yes	yes	yes	yes
Activity history on watch	yes	yes	yes	yes
Physio TrueUp	yes	yes	yes	yes
Running Features				
Available run profiles	Running, Treadmill Running, Track Running, Indoor Track Running, Trail Running	Running, Treadmill Running, Track Running, Indoor Track Running, Trail Running	Running, Outdoor Track Running, Treadmill Running, Indoor Track Running, Trail Running	Running, Outdoor Track Running, Treadmill Running, Indoor Track Running, Trail Running
GPS-based distance, time and pace	yes	yes	yes	yes
Running dynamics	Yes (with compatible accessory)	Yes (with compatible accessory)	Yes (with compatible accessory)	Yes (with compatible accessory)
Vertical oscillation and ratio	Yes (with compatible accessory)	Yes (with compatible accessory)	Yes (with compatible accessory)	Yes (with compatible accessory)
Ground contact time and balance	Yes (with compatible accessory)	Yes (with compatible accessory)	Yes (with compatible accessory)	Yes (with compatible accessory)
Stride length (real time)	Yes (with compatible accessory)	Yes (with compatible accessory)	Yes (with compatible accessory)	Yes (with compatible accessory)
Cadence	yes	yes	yes	yes
Running power	Yes (with compatible accessory)	Yes (with compatible accessory)	Yes (with compatible accessory)	Yes (with compatible accessory)
Performance condition	yes	yes	yes	yes
Lactate threshold	Yes (with compatible accessory)	Yes (with compatible accessory)	Yes (with compatible accessory)	Yes (with compatible accessory)
Run workouts	yes	yes	yes	yes

Trail run auto climb	yes	yes	yes	yes
Race predictor	yes	yes	yes	yes
Foot pod capable	yes	yes	yes	yes
Run/Walk/Stand detection	yes	yes	yes	yes
Golfing Features				
Yardage to F/M/B	yes	yes	yes	yes
Yardage to layups/doglegs	yes	yes	yes	yes
Measures shot distance	manual	manual	manual	manual
Digital scorecard	yes	yes	yes	yes
Stat tracking	yes	yes	yes	yes
Garmin AutoShot™	yes	yes	yes	yes
Auto CourseView updates	yes	yes	yes	yes
Green View with manual pin position	yes	yes	yes	yes
Hazards and course targets	yes	yes	yes	yes
Round timer/odometer	yes	yes	yes	yes
Automatic club tracking compatible	yes	yes	yes	yes
Tournament legal	yes	yes	yes	yes
Outdoor Recreation				
Available outdoor recreation profiles	Hiking, Indoor Climbing, Bouldering, Climbing, Skiing, Snowboarding, XC Classic Skiing, Stand Up Paddleboarding, Rowing, Kayaking, Hunting, Snowshoeing, Fishing, Horseback Riding, Tennis, Tactical	Hiking, Indoor Climbing, Bouldering, Climbing, Skiing, Snowboarding, XC Classic Skiing, Stand Up Paddleboarding, Rowing, Kayaking, Hunting, Snowshoeing, Fishing, Horseback Riding, Tennis, Tactical	Hiking, Indoor Climbing, Bouldering, Climbing, Skiing, Snowboarding, XC Classic Skiing, Stand Up Paddleboarding, Rowing, Kayaking, Snowshoeing, Hunting, Fishing, Horseback Riding, Tennis, Tactical	Hiking, Indoor Climbing, Bouldering, Climbing, Skiing, Snowboarding, XC Classic Skiing, Stand Up Paddleboarding, Rowing, Kayaking, Snowshoeing, Hunting, Fishing, Horseback Riding, Tennis, Tactical
Point-to-point navigation	yes	yes	yes	yes
Bread crumb trail in real time	yes	yes	yes	yes
Back to start	yes	yes	yes	yes
TracBack®	yes	yes	yes	yes
UltraTrac mode	yes	yes	yes	yes
Reference point	yes	yes	yes	yes
Elevation profile	yes	yes	yes	yes
Distance to destination	yes	yes	yes	yes
Barometric trend indicator	yes	yes	yes	yes
Vertical speed	yes	yes	yes	yes
Total ascent/descent	yes	yes	yes	yes
Future elevation plot	yes	yes	yes	yes
GPS coordinates	yes	yes	yes	yes
Sight 'N Go	yes	yes	yes	yes
Area calculation	yes	yes	yes	yes
Projected waypoint	yes	yes	yes	yes
Sun and moon information	yes	yes	yes	yes
XERO™ Locations	yes	yes	yes	yes
Expedition GPS Activity	yes	yes	yes	yes
Cycling Features				
Available cycling profiles	Biking, Road Biking, Mountain Biking, Gravel Biking, Bike Commuting, Bike Touring, eBiking, eMountain Biking, Indoor Biking, Cyclocross, Triathlon	Biking, Road Biking, Mountain Biking, Gravel Biking, Bike Commuting, Bike Touring, eBiking, eMountain Biking, Indoor Biking, Cyclocross, Triathlon	Bike, Road Bike, MTB, Gravel Bike, Cyclocross, Bike Commute, Bike Tour, eBike, eMTB, Bike Indoor, Triathlon	Bike, Road Bike, MTB, Gravel Bike, Cyclocross, Bike Commute, Bike Tour, eBike, eMTB, Bike Indoor, Triathlon
Alerts	yes	yes	yes	yes
Courses	yes	yes	yes	yes
MTB Grit & Flow	yes	yes	yes	yes
Bike lap and lap maximum power	yes	yes	yes	yes
Race an activity	yes	yes	yes	yes
FTP (Functional Threshold Power)	yes	yes	yes	yes
Compatible with Vector™ and Rally™	yes	yes	yes	yes
Power meter compatible	yes	yes	yes	yes
Advanced cycling dynamics	yes	yes	-	-
Compatible with Varia™ radar	yes	yes	yes	yes
Compatible with Varia™ lights	yes	yes	yes	yes
Speed and cadence sensor support	yes	yes	yes	yes
Swimming Features				
Available swim profiles	Pool swimming, open water swimming	Pool swimming, open water swimming	Pool swimming, open water swimming	Pool swimming, open water swimming
Open-water swim metrics	yes	yes	yes	yes
Pool swim metrics	yes	yes	yes	yes
Stroke type detection	yes	yes	yes	yes
Drill logging (pool swim only - PSO)	yes	yes	yes	yes
Basic rest timer (up from 0) (PSO)	yes	yes	yes	yes
"Repeat on" rest timer (PSO)	yes	yes	yes	yes
Auto rest (PSO)	yes	yes	yes	yes
Time and distance alerts	yes	yes	yes	yes
Countdown start (PSO)	yes	yes	yes	yes
Pool swim workouts	yes	yes	yes	yes
Underwater wrist-based heart rate	yes	yes	yes	yes
Heart rate from external HRM	yes	yes	yes	yes
Kid Activity Tracking Features				
Toe-to-Toe™ Challenges app	Yes (optional Connect IQ Toe-to-Toe™ Challenges app)	Yes (optional Connect IQ Toe-to-Toe™ Challenges app)	Yes (optional Connect IQ Toe-to-Toe™ Challenges app)	Yes (optional Connect IQ Toe-to-Toe™ Challenges app)
Connectivity				
Smart trainer control	yes	yes	yes	yes