	Fenix 6 Pro Solar	**Instinct Solar**	**Forerunner 945**
General			
Lens Material	Power Glass™	Power Glass™	Corning® Gorilla® Glass DX
Bezel Material	Stainless steel or Diamond-Like Carbon (DLC) coated titanium	Fibre-reinforced polymer	fiber-reinforced polymer
Case material	Fibre-reinforced polymer with metal rear cover	Fibre-reinforced polymer	-
QuickFit™ watch band compatible	22 mm band included	Yes (22 mm)	yes (22 mm)
Strap material	Silicone or titanium	Silicone	silicone
Physical size	47 x 47 x 15.1 mm	45 x 45 x 15.3 mm	47 x 47 x 13.7 mm
Colour display	yes	-	yes
Display size	33.02 mm diameter	23 x 23 mm	30.4 mm diameter
Display resolution	260 x 260 pixels	128 x 128 pixels	240 x 240 pixels
Display type	Sunlight-visible, transflective memory-in-pixel (MIP)	Monochrome, sunlight-visible, transflective memory-in-pixel (MIP)	sunlight-visible, transflective memory-in-pixel (MIP)
Weight	Steel: 85 g Titanium: 72 g	53 g	50 g
Battery life			
Smartwatch	Up to 14 days/16 days with solar*	Up to 24 days/54 days with solar*	Up to 2 weeks
Battery saver watch mode	Up to 48 days/80 days with solar*	Up to 56 days/Unlimited with solar*	-
GPS	Up to 36 hours/40 hours with solar*	Up to 30 hours/38 hours with solar*	Up to 36 hours
GPS and music	Up to 10 hours		Up to 10 hours
Max battery GPS mode	Up to 72 hours/93 hours with solar*	Up to 70 hours/145 hours with solar*	-
Expedition GPS Activity	Up to 28 days/36 days with solar*	Up to 28 days/ 68 days with solar*	-
* Solar charging, assuming all-day wear with 3 hours per day outside in 50,000 lux conditions			
Water rating	10 ATM	10 ATM	5 ATM
Memory/History	32 GB	16 MB	200 hours of activity data
Clock Features			
Time/date	yes	yes	yes
GPS Time Sync	yes	yes	yes
Automatic daylight saving time	yes	yes	yes
Alarm clock	yes	yes	yes
Timer	yes	yes	yes
Stopwatch	yes	yes	yes
Sunrise/sunset times	yes	yes	yes
Health Monitoring			
Wrist-based Heart Rate	yes	yes	yes
Daily Resting Heart Rate	yes	yes	yes
Abnormal Heart Rate Alerts	yes (high and low)	yes (high and low)	yes (high and low)
Respiration rate (24x7)	yes	-	yes
Pulse Ox Blood Oxygen Saturation	yes	-	yes
Fitness Age	yes	yes	yes
Body Battery™ Energy Monitor	yes	yes	yes
All-day Stress Tracking	yes	yes	yes
Relaxation reminders	yes	-	-
Relaxation breathing timer	yes	yes	yes
Sleep	yes	yes	yes
Advanced sleep monitoring	yes	-	yes
Hydration	yes	yes	yes
Menstrual Cycle	yes	yes	yes
Sensors			
GPS	yes	yes	yes
GLONASS	yes	yes	yes
Galileo	yes	yes	yes
Garmin Elevate™ wrist heart rate monitor	yes	yes	yes
Barometric altimeter	yes	yes	yes
Compass	yes	yes	yes
Gyroscope	yes	-	yes
Accelerometer	yes	yes	yes
Thermometer	yes	yes	yes
Pulse Ox Blood Oxygen Saturation Monitor	yes (with Acclimation)	yes	yes
Daily Smart Features			
Connectivity	Bluetooth® Smart, ANT+®	Bluetooth®, ANT+®	Bluetooth®, ANT+®, Wi-Fi®
Connect IQ™	yes	-	-
Smart notifications	yes	yes	yes
Text response/reject phone call with text (Android™ only)	yes	yes	yes
Calendar	yes	yes	yes
Weather	yes	yes	yes
Battery Saver - customizable low power watch	yes	yes	-
Controls smartphone music	yes	yes	yes
Plays and controls watch music	yes	-	-
Music Storage	Up to 2,000 songs	-	Up to 1000 songs
Find My Phone	yes	yes	yes
Find My Watch	yes	yes	yes
VIRB® Remote	yes	yes	yes
Smartphone compatibility	iPhone®, Android™	iPhone®, Android™	iPhone®, Android™
Pairs with Garmin Connect™ Mobile	yes	yes	yes
Garmin Pay™	yes	-	yes
Safety and Tracking Features			
LiveTrack	yes	yes	yes
Group LiveTrack	yes	-	yes
Live Event Sharing	yes	-	Android™ Only
Incident Detection during select activities	yes	-	yes
Assistance	yes	-	yes
Tactical Features			
Dual grid coordinates	yes	yes	yes
Activity Tracking Features			
Step counter	yes	yes	yes
Move bar	yes	yes	yes
Auto goal	yes	yes	yes
Calories burned	yes	yes	yes
Floors climbed	yes	yes	yes
Distance traveled	yes	yes	yes
Intensity minutes	yes	yes	yes
TrueUp™	yes	yes	yes
Move IQ™	yes	yes	yes
Gym & Fitness Equipment			
Available gym activity profiles	Strength, cardio and elliptical training, stair stepping, floor climbing, indoor rowing, Pilates and yoga	Strength, Cardio and Elliptical Training, Stair Stepping, Floor Climbing, Indoor Rowing and Yoga	Strength, Cardio and Elliptical Training, Stair Stepping, Floor Climbing, Indoor Rowing, Pilates and Yoga
Cardio workouts	yes	yes	yes
Strength workouts	yes	yes	yes
Yoga workouts	yes	-	yes
Pilates workouts	yes	-	yes
On-screen workout animations	yes	-	-
Automatic rep counting	yes	yes	yes
Training, Planning and Analysis Features			
HR zones	yes	yes	yes
HR alerts	yes	yes	yes
HR calories	yes	yes	yes
% HR max	yes	yes	yes
% HRR	yes	yes	yes
Recovery time	yes	-	yes
Auto max HR	yes	yes	yes
HRV stress test	yes (with compatible accessory)	-	yes (with compatible accessory)
HR Broadcast	yes	yes	yes
Respiration rate (during exercise)	yes (with compatible accessory)	-	yes (with compatible accessory)
GPS speed and distance	yes	yes	yes
Customizable data pages	yes	yes	yes
Customizable activity profiles	yes	yes	yes
Auto Pause®	yes	yes	yes
Interval training	yes	yes	yes
Advanced workouts	yes	yes	yes
Downloadable training plans	yes	yes	yes
Power Modes - customizable in-activity battery settings	yes	yes	-
Auto Lap®	yes	yes	yes
Manual lap	yes	yes	yes
Configurable lap alerts	yes	yes	yes

MapWorld

Comparison: Fenix 6 Solar, Instinct Solar, Forerunner 945

	Fenix 6 Solar	Instinct Solar	Forerunner 945
Heat and altitude acclimation	yes	-	yes
Vo2 max	yes	-	yes
Training Status	yes	-	yes
Training Load	yes	-	yes
Training load focus	yes	-	yes
Training Effect	yes	-	yes
Training Effect (anaerobic)	yes	-	yes
Primary benefit (Training Effect labels)	yes	-	yes
Custom alerts	yes	yes	yes
Audio prompts	yes	yes	yes
Finish time	yes	yes	yes
Virtual Partner	yes	yes	yes
Race an Activity	yes	yes	yes
Auto multisport activities	yes	-	yes
Manual multisport activities	yes	-	yes
Course guidance	yes	yes	yes
Garmin Live Segments	yes	-	yes
Strava Live Segments	yes	-	yes
Round-trip course creator (running/cycling)	yes	-	yes
Trendline™ Popularity Routing	yes	-	yes
Touch and/or button lock	yes	yes	yes
Hot keys	yes	yes	yes
Auto scroll	yes	yes	yes
Activity history on watch	yes	yes	yes
Physio TrueUp	yes	yes	yes
Running Features			
Available run profiles	Running, treadmill running, indoor track running, trail running, virtual running	Running, Treadmill Running, Indoor Track Running, Trail Running	Running, Indoor and Outdoor Track Running, Treadmill Running, Trail Running, Virtual Running
GPS-based distance, time and pace	yes	yes	yes
Running dynamics	yes (with compatible accessory)	-	yes (with compatible accessory)
Vertical oscillation and ratio	yes (with compatible accessory)	-	yes (with compatible accessory)
Ground contact time and balance	yes (with compatible accessory)	-	yes (with compatible accessory)
Stride length (real time)	yes (with compatible accessory)	-	yes (with compatible accessory)
Cadence	yes	yes	yes
Performance condition	yes	-	yes
Lactate threshold	yes (with compatible accessory)	-	yes (with compatible accessory)
PacePro™ Pacing Strategies	yes	-	yes
Run workouts	yes	yes	yes
Race predictor	yes	-	yes
Foot pod capable	yes	yes	yes
Golfing Features			
Preloaded with 41,000 courses worldwide	yes	-	yes
Yardage to F/M/B	yes	-	yes
Yardage to layups/doglegs	yes	-	yes
Measures shot distance	Automatic	-	Automatic
Digital scorecard	yes	-	yes
Custom targets	yes	-	-
Stat tracking	yes	-	yes
Garmin AutoShot™	yes	-	yes
Full vector map	yes	-	-
Auto CourseView updates	yes	-	yes
Green View with manual pin position	yes	-	yes
Hazards and course targets	yes	-	yes
PinPointer	yes	-	-
PlaysLike distance	yes	-	-
Touch-targeting	yes	-	-
Handicap scoring	yes	-	-
TruSwing™ compatible	yes	-	yes
Round timer/odometer	yes	-	yes
Automatic club tracking compatible	yes (with compatible accessory)	-	-
Outdoor Recreation			
Available outdoor recreation profiles	Hiking, indoor and outdoor climbing, bouldering, surfing, mountain biking, skiing, snowboarding, XC skiing, stand up paddleboarding, rowing, kayaking, Jumpmaster, tactical	Hiking, Climbing, Mountain Biking, Skiing, Snowboarding, XC Skiing, Stand Up Paddleboarding, Rowing, Kayaking, Fishing, Hunting, Tactical	Hiking, Climbing, Mountain Biking, Skiing, Snowboarding, XC Skiing, Stand Up Paddleboarding, Rowing, Kayaking
Point-to-point navigation	yes	yes	yes
Bread crumb trail in real time	yes	yes	yes
Back to start	yes	yes	yes
TracBack®	yes	yes	yes
UltraTrac mode	yes	yes	yes
Around Me mode	yes	-	yes
Elevation profile	yes	yes	yes
Distance to destination	yes	yes	yes
Barometric trend indicator with Storm Alert	yes	yes	yes
ClimbPro™ Ascent Planner	yes	-	yes
Trail run auto climb	yes	yes	yes
Vertical speed	yes	yes	yes
Total ascent/descent	yes	yes	yes
Future elevation plot	yes	yes	yes
Preloaded topographical maps	yes	-	yes
Preloaded ski resort maps	yes	-	-
Downloadable cartography support	yes	-	yes
Compatible with BaseCamp™	yes	yes	yes
GPS coordinates	yes	yes	yes
Sight 'N Go	yes	yes	-
Area calculation	yes (via Connect IQ™)	yes	yes (via Connect IQ™)
Hunt/fish calendar	yes (via Connect IQ™)	-	yes (via Connect IQ™)
Projected waypoint	yes	yes	yes
Sun and moon information	yes (via Connect IQ™)	yes	yes (via Connect IQ™)
XERO™ Locations	yes	yes	yes
Expedition GPS Activity	yes	yes	-
Tides	yes (via Connect IQ™)	-	-
Cycling Features			
Alerts	yes		yes
Courses	yes		yes
Cycle Map	yes		yes
MTB Grit & Flow	yes	-	yes
Available cycling profiles	Biking, indoor biking, mountain biking, triathlon	Biking, Indoor Biking, Mountain Biking	Biking, Indoor Biking, Mountain Trail Biking
Bike lap and lap maximum power	yes		yes
Race an activity	yes	yes	yes
FTP (Functional Threshold Power)	yes (with compatible accessory)	-	yes (with compatible accessory)
Compatible with Vector™ (power meter)	yes	-	yes
Power meter compatible	yes	-	yes
Advanced Vector support	yes	-	yes
Compatible with Varia Vision™	yes	-	yes
Compatible with Varia™ radar	yes	-	yes
Compatible with Varia™ lights	yes	-	yes
Speed and cadence sensor support	Yes (ANT+® and Bluetooth® Smart sensors)	Yes (ANT+® and Bluetooth® Smart sensors)	yes
Swimming Features			
Available swim profiles	Pool swimming, open water swimming, swimming/running	Pool Swimming, Open Water Swimming	Pool Swimming, Open Water Swimming, Swimrun
Open-water swim metrics	yes	yes	yes
Pool swim metrics	yes	yes	yes
Stroke type detection	yes	yes	yes
Drill logging (pool swim only)	yes	yes	yes
Basic rest timer (up from 0) (pool swim)	yes	yes	yes
"Repeat on" rest timer (pool swim)	yes	yes	yes
Auto Rest (Pool Swim Only)	yes	-	yes
Time and distance alerts	yes	yes	yes
Pacing alerts (pool swim only)	yes	-	yes
Countdown start (pool swim only)	yes	-	yes
Pool swim workouts	yes	yes	yes
Critical swim speed	yes	-	yes
Underwater wrist-based heart rate	yes	yes	yes
Heart rate from external HRM	yes	yes	yes
Kid Activity Tracking Features			yes
Toe-to-Toe™ Challenges	yes (optional Connect IQ app)	-	yes (optional Connect IQ app)