Futaba®

We Put the Future of R/C in Your Hands™

There's regular spread spectrum technology — and then there's FASST

Futaba Advanced Spread Spectrum Technology

2.4GHz FASST™

What's the difference?

More experience

Spread spectrum technology is new to hobby R/C, but familiar ground to Futaba. So when we introduced our first hobby system in 2007, it wasn't a limited-range park flyer system we *hoped* would work. It was the 6EX, a full range full-featured system based on 15 years of proven performance, using proprietary chips and circuitry we'd developed for our first industrial system almost a generation before.

Greater dependability
on land, in the air *and* on the water.

A system that "sits" on just two frequencies is dependable until someone turns on a system that uses the same two frequencies. Once that happens, things can go bad in a hurry.

FASST systems avoid this with Continuous Channel Shifting. By using a larger number of frequencies *and* switching among them hundreds of times each second, Continuous Channel Shifting reduces the chances of interference to virtually nothing.

Futaba's patented Pre-Vision™ feature reduces the chances even further. It scans incoming signals, to detect and correct imperfect data at the receiver and ensure that the signal reaching your servos is perfectly and totally clear.

And while most manufacturers still advise against using spread spectrum systems in boats, FASST systems have been helping boat drivers rack up wins and take national titles almost since FASST was introduced.

Stronger signals without satellites.

Some 2.4GHz systems require up to 5 receivers to ensure maximum signal strength. FASST systems do it with just one. Dual Antenna Diversity guarantees you the strongest signal possible, without buying — or installing — multiple components.

Faster, easier links

Linking your transmitter and receiver should be fast and simple — and FASST Easy Link™ receivers make it both. Instead of binding plugs and multi-step procedures, there's a push-button. Pressing it once creates an unbreakable transmitter-receiver link in seconds, even when the airwaves are crowded.
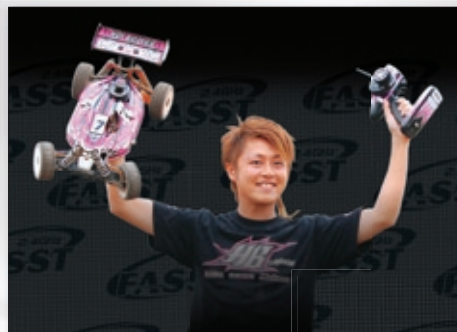
More wins.

Winning takes talent, hard work and the right equipment — and these are just a few of the champions who choose Futaba.

Atsushi Hara, 2008 IFMAR 1/8 Scale Buggy Champion, celebrating with the 4PK FASST.

The U.S.A.'s F3A team for 2009 includes Jason Shulman, Andrew Jesky and Brett Wickizer. Their unanimous radio of choice: the 14MZ!

"My mission is simple: to design, build and fly every plane I've ever liked."
 — *Carl Bachhuber*

"I've been using Futaba products for over 30 years," Carl explains. "My newest radio, the 12FGA FASST, takes that great tradition to a whole new level. I need absolutely reliable, versatile, interference-resistant control, and this terrific system delivers."

"Double 1-2-3 Sweep for Futaba pilots at 2008 XFC!" Andrew Jesky took top honors in airplane competition, followed by team members Jason Noll and Kelly Gerber. Champion Dominik Hagele and team members Bobby Watts & Nick Maxwell dominated the heli division.

World-class service.

With its expert technicians and advanced diagnostic tools, the Service Center gives your Futaba radio system the knowledgeable care that it deserves. If it needs repair, they get it right the first time.

Its location in the central United States means that shipping to most areas of the country takes only two days. You get your radio back fast, without paying high overnight shipping charges.

Futaba Service Center USA

Address: 3002 N. Apollo Dr. Suite 1, Champaign, IL 61822

Telephone: 1-217-398—0007.
Available Monday-Friday, 8 a.m.-5 p.m., Central Standard Time (CST)

Fax: 1-217-398-7721.
(Please be sure to include a daytime telephone number or return fax number.)

E-mail: service@futaba-rc.com

"You guys have a winner!"
 — *Pilot David Shulman, on using the 14MZ to test his Rafale B-01*

"I put on three solid flights, flying the heck out of the new jet — far, fast and hard. The resolution and reliability of the 14MZ were phenomenal."

"Setup and programming normally take a long time, a few evenings. But the 14MZ has been a dream. Dropping it into a new jet and setting it all up requires as little as 20 minutes, flap mixes and all. The best part? No 'satellite' receivers."

Want to find a dealer? Visit findfutaba.com
For more on the 14MZ system, visit 14mz.com

14MZ™ 14-Channel FASST Computer Radio

The world's only 14-channel R/C system — with unrivaled power and dependability.

It's Futaba's most advanced radio — designed for the pilot who demands the very best.

You can program the 14MZ FASST with a touch or by using the rotary dial to pull up any of its 30 digitally precise model memories in an instant. Once you do, get ready to experience performance perfection that you might have believed impossible!

You can add your own audio and picture files; tailor switch location, style and function to your preference; and enjoy up to three hours of flying time before recharging your transmitter pack.

The Futaba FASST 14MZ — nothing else comes close!

14MZ System Overview

- 2048 resolution
- Real-Time Response™
- Dual internal processors: Windows® CE for set-up/programming tasks; Futaba for flight control functions
- Dual programming methods: "Touch n' Go™" touch screen or rotary dial and direct select buttons
- Capable of FM/PPM, PCM1024 and PCM2048 operation
- Airplane / heli and glider software
- 30-model memory, expandable to 130 models*
- Model clear, copy and naming
- Assignable switches/functions
- Switch customizing
- 6 factory-preset Variable Dual Rates™
- Servo Grouping™ for multi-servo synchronization
- Engine mixing (for up to 4 engines)
- Transflexive, backlit 640 x 240 HVGA display w/ adjustable contrast
- 10 programmable mixes

- 24 factory-defined mixes (16 air; 8 heli)
- 9 flight conditions
- 6 digital trims
- Servo monitor display
- Servo reversing, servo center and EPA
- Mode 1-4 selectable
- Throttle cut/idle down
- Swash AFR
- Gimbals with quad bearings and long-life potentiometers
- Sticks with adjustable length, tension and detent
- 4 slider switches (2 side-mount; 2 front/back accessible)
- 7-color status LED
- Charging, DSC and trainer jacks
- Deluxe metal carrying case
- Wall chargers, touch screen stylus, cleaner, neck strap, DSC cord, rubber grips and hex wrenches

14MZ Specifics

- Variable Dual Rates can be assigned to any function in any configuration (they can be combined with Expo and activated automatically, without program mixing, by bringing a specific function on-line)
- Ultra-fine, 0.5% setting increments for precision set-up and "quick-step" mode for multi-increment advancement
- Free online software downloads of updates and upgrades
- Free membership in Futaba Flyers Club

* 32MB Compact Flash Card included. Ideal for downloading/storing images; recording/playback of sound files & voice prompts; expanding memory by 100 models.

Stock #	System	Band	Receiver	Tx LiIon	Rx NiCd	Mode	Tx Module
FUTK9400	14MZAP FASST	2.4GHz	R6014FS	2200mAh	1500mAh	2	TM-14
FUTK9401	14MZHP FASST	2.4GHz	R6014FS	2200mAh	1500mAh	2	TM-14

Also available in Mode 1

12Z

12-Channel 2.4GHz Computer Systems

Powered by dual processors!

It's the only system that rivals the 14MZ in performance and programming potential — and the 12Z offers exceptional value as well. All the functions you could want are here and ready to take your flying to the next level.

FUTABA ADVANCED SPREAD SPECTRUM TECHNOLOGY
2.4GHz
FASST™

12Z Overview

- *Dial 'n Key programming*
- *300 x 128 LCD w/adjustable contrast*
- *25-model memory, expandable to 245 models**
- *Model clear, copy & naming*
- *Menus/Functions: System (8); Linkage (14 airplane/16 heli); Model (14 airplane/17 heli)*
- *Airplane/glider & heli software*
- *10 programmable mixes*
- *24 factory-defined mixes*
- *8 flight conditions*
- *Digital trims*
- *Assignable switches/functions*
- *2048 resolution*
- *Real-Time Response™*
- *6 Variable Dual Rates™*
- *Servo Grouping™ for multi-servo synchronization*
- *Capable of FM/PPM, PCM1024 or PCM2048 operation*
- *Servo reversing, servo center & EPA*
- *Mode 1-4 selectable*
- *Gimbals with quad bearings and long-life potentiometers*
- *Sticks w/adjustable length, tension and detent*
- *8 shoulder switches*
- *2 slider switches*
- *3 rotary dials*
- *7.4V, 2200mAh Lithium Ion Tx and 4.8V, 1500mAh NiCd batteries w/chargers*
- *Lockable metal carrying case*

* Requires optional 32MB Compact Flash Card (FUTM9410)

12Z Specifics

- *Includes two Futaba processors: one for flight control, one for set-up/programming*
- *"Joystick" button for faster, simpler menu navigation*
- *Variable Dual Rates that can be assigned to any function in any configuration*
- *Ultra-fine 0.5% setting increments and "fast forward" mode for multi-increment advancement*
- *Engine mixing option for synchronizing up to four engines*
- *Backplate-mounted slider switches offer fingertip control*
- *Free membership in the Futaba Flyers Club*
- *Free online downloads of system enhancements and software updates*

Stock #	System	Band	Receiver	Tx Li-ION	Rx NiCd	Tx Module	Mode
FUTK9300	12ZAP FASST	2.4GHz	R6014FS	2200mAh	1500mAh	TM-14	2
FUTK9301	12ZHP FASST	2.4GHz	R6014FS	2200mAh	1500mAh	TM-14	2

Also available in Mode 1

12FG

12-Channel 2.4GHz Computer Systems

Affordable, cutting-edge 12-channel control...

Download upgrades/updates online – free!

The most amazing thing about the 12FG is not how much it can do. It's how it can do so much, yet be so affordable! The 12FG offers more than the cutting-edge dependability of 2.4GHz FASST™ technology; it offers many of the features you'll find on our 12Z and 14MZ systems: 2048 resolution, programmable and factory-defined mixes, plus the ability to download updates and programming enhancements online, free of charge. Unrivaled technology. Unsurpassed value. The 12FG 2.4GHz – only from Futaba.

12FG System Overview

- Dial 'n Key™ programming
- Assignable switches/functions
- Heli, airplane and glider software
- 10 programmable mixes
- 46 factory-defined mixes/functions (14 heli; 32 airplane/glider)
- 30-model memory (expandable to 1,088 models*)
- 8-character model naming
- 2048 resolution
- 6 digital trims
- Servo Grouping™
- 6 Variable Dual Rates™
- Dual/triple rates, servo centering, servo reversing, exponential and endpoint adjustment
- 8 flight conditions w/delay
- 255 x 96 LCD w/adjustable contrast
- Free downloads of software updates/upgrades
- Fail-safe
- Servo monitor display
- 2 slider switches (front/back access)
- 17-point throttle and pitch curves
- Model clear, copy, re-set
- AFR (Adjustable Function Rate)

- "Full functionality" trainer system
- Adjustable throttle cut/idle down
- Condition hold
- 0.5% settings increments
- Variable/exponential rate single switch option

- Additional features: elapsed time counter; dual, independent up/down timers; quad bearing gimbals; sticks w/length tension adjustments; heavy-duty switch harness; neck strap; Tx and Rx batteries; charger and charge jack

*A 1GB SD card is required for maximum memory capacity. SD card sold separately.

Also available in Mode 1

Stock #	System	Band	Receiver	Tx NiMH	Rx NiCd	Mode	Tx Module
FUTK9275	12FGA FASST	2.4GHz	R6014FS	1700mAh	1500mAh	2	TM-14
FUTK9276	12FGH FASST	2.4GHz	R6014FS	1700mAh	1500mAh	2	TM-14

10CG

10-Channel Computer System

Pro-level features at a sport-system price.

The **10C**G is perfect for the price-conscious pilot — an integrated, 2.4GHz treasure trove of features formerly found only on the most advanced Futaba systems.

But it's also a system that boasts advantages few others can claim: *7-point* throttle and pitch curves; 4 heli flight modes; a round dozen factory-defined glider mixes; graphics for programming swash plate types; swash ring; and *logic switches* that allow you to activate a timer or other function just by changing the positions of specific sticks or switches.

10CG System Overview

- *Dial 'n Key™ programming w/joystick*
- *Airplane, heli and glider software*
- *2048 resolution*
- *Real-Time Response™*
- *Smart Switch Technology™*
- *Basic & advanced menus*
- *15-model memory, expandable to 48 models**
- *10-character model & user naming*
- *Assignable switches & dials/functions*
- *Model select, copy, re-set*
- *Data transfer*
- *2 proportional slider switches*
- *Fail-safe, sub-trims, servo reversing & EPA*
- *Digital trims & trim step, expo & dual/triple rates*
- *160 x 72 backlit LCD w/ adjustable contrast*
- *Servo monitor display*

- *Auxiliary channel screen for 1-step function/ switch assignment*
- *Model & system timers*
- *Full functionality trainer system (cord required)*
- *Throttle cut, hold & idle down*
- *Mode 1-4 selectable*
- *Sticks w/length and tension adjustments*

*Requires optional 128K CAMPac Module (FUTM9408)

Airplane Features

- *8 programmable mixes, plus*
- *Elevator/Flap; throttle needle; aileron differential; flaperons; V-tail; elevon; and air brake w/elevator delay*
- *Ailevator; 4-position snap roll switch; 2 independent gyro settings; 7-point throttle curve; and flap trim*

Heli Features

- *6 programmable mixes, plus*
- *Hover/pitch; hover throttle; 8 swash plate types w/graphics; swash AFR; 5-point revo mixing; gyro menu; 7-point throttle & pitch curves w/ delay; high/low pitch setting; swash ring; and throttle hold & 3 idle-ups w/delay*

Glider Features

- *8 programmable mixes, plus*
- *Butterfly/elevator (2); elevator/flap; chamber mix; aileron/flap; aileron/rudder; flaperons; V-tail; and 4-point offset;*
- *Spoiler mix; single/dual flap servos; 5 flight conditions; 3 wing types; and adjustable motor cut*

Stock #	System	Band	Receiver	Tx NiCd	Rx NiCd	Mode	Tx Module
FUTK9255	10CGA FASST	2.4GHz	R6014HS	700mAh	600mAh	2	—
FUTK9256	10CGH FASST	2.4GHz	R6014HS	700mAh	1000mAh	2	—
FUTK9257	10CGA FASST	2.4GHz	R6014HS	700mAh	600mAh	1	—
FUTK9258	10CGH FASST	2.4GHz	R6014HS	700mAh	1000mAh	1	—
FUTJ9150+	10CA	72HMz	R3110DPS	700mAh	—	2	TP-FSM*
FUTJ9151+	10CH	72HMz	R3110DPS	700mAh	—	2	TP-FSM*

Legend: + = Synthesized; * = Modular

7C
7-Channel FASST Computer Systems

Programming simplicity meets 2.4GHz safety and sophistication.

Simply rotating and pressing a dial walks you clearly and logically through 7C programming — where basic menus cut set-up time to the bare minimum, and advanced menus get maximum performance from every flight.

You also enjoy the confidence of flying with all the advantages of FASST signal security: Easy Link™ Tx/Rx linking, Continuous Channel Shifting, patented Pre-Vision™ data screening and Dual Antenna Diversity.

Choose the 7C instead of a standard 6-channel system and you gain more than another channel. You move up to new levels of simplicity, safety and sophistication.

7C System Overview

- *Airplane and heli software*
- *Basic and advanced menus*
- *Dial n' Key™ programming*
- *10-model memory*
- *6-character model naming*
- *Model copy*
- *Assignable switches/functions*
- *Endpoint adjustment (EPA), sub-trims and servo reversing*
- *Digital trims, memory and trim step*
- *Dual or triple rates and exponential*
- *Adjustable throttle cut*
- *Battery and throttle fail-safes*
- *72 x 32 LCD w/adjustable contrast*
- *Variable rate knob*
- *Trainer system (cord required)*
- *Sticks with adjustable length and tension*
- *Count-up/countdown timer*
- *Low-battery, mixing and RF alerts*

Airplane Features

- **3 programmable mixes, plus**
- *Flaperon*
- *Elevator/flap*
- *Flap/elevator*
- *V-Tail/elevon*
- *Aileron/rudder*
- *Snap roll*
- *Ailevator (dual elevator servos)*
- *Air brake*
- *Flap trim (dual aileron servos)*

Helicopter Features

- **3 programmable mixes, plus**
- *Revo mixing*
- *Governor mixing*
- *Gyro menu*
- *Swash/throttle mixing*
- *5-point throttle & pitch curves w/2 idle ups*
- *Hovering throttle/pitch*
- *Throttle hold*
- *Trim offset (aileron/elevator/rudder)*
- *6 swash plate types (5 CCPM options)*
- *Swash AFR*

Stock #	System	Band	Receiver	Servo(s)	Tx NiCd	Rx NiCd	Mode
FUTK7000	7CA FASST	2.4GHz	R617FS	(4) S3152	600 mAh	600 mAh	2
FUTK7001	7CH FASST	2.4GHz	R617FS	(4) S3152	600 mAh	1000 mAh	2
FUTK7002	7CA FASST	2.4GHz	R617FS	(4) S3004	600 mAh	600 mAh	2
FUTK7003	7CH FASST	2.4GHz	R617FS	(4) S3001	600 mAh	1000 mAh	2
FUTK7004	7CA FASST	2.4GHz	R617FS	—	600 mAh	—	2
FUTK7005	7CH FASST	2.4GHz	R617FS	—	600mAh	—	2

6EX
6-Channel 2.4GHz Computer Systems

R/C's best buy in a 6-channel computer radio.

From simple programming for first-timers to excellent versatility for old pros, the 6EX is one system that virtually any pilot will enjoy flying with. And when you factor in all of the advantages of 2.4GHz technology, it's easy to see why the 6EX is a great radio at a great price.

FUTABA ADVANCED SPREAD SPECTRUM TECHNOLOGY
2.4GHz FASST™

6EX Overview

- 6-model memory
- 4-character model naming
- Simple 1 lever/2 button programming
- Airplane and heli software
- LCD
- Digital trims
- EPA and servo reversing
- Dual rates & exponential (ail/ele/rud)
- Single-switch control of dual rates and expo
- Throttle and battery fail-safe
- Mode 1-4 selectable
- Adjustable throttle cut
- Flap switch
- Retract switch
- Dual-rate switch
- Tx NiCd & dual output charger
- Low battery and mixing alarms
- Adjustable stick length
- Trainer system (cord required)

Airplane Menu

- 2 programmable mixes
- 4 factory-defined mixes
  - Flaperon
  - V-tail mixing
  - Flap trim
  - Elevon mixing

Helicopter Menu

- 9 factory-defined mixes
  - Throttle hold
  - Gyro mixing
  - Revo mixing
  - Throttle curve (5-point, normal & idle-up)
  - Pitch curve (5-point, normal & idle-up)
  - Swash-to-throttle mixing
  - 3 swash plate types (independent, plus 90° and 120° CCPM)
  - Swash ARF (plus 90° and 120° CCPM)
  - Mixing alert

Stock #	System	Band	Receiver	Servo(s)	Tx NiCd	Rx NiCd
FUTK6900	6EXA/H FASST	2.4GHz	R617FS	—	600mAh	—
FUTK6901	6EXA FASST	2.4GHz	R617FS	(4) S3004	600mAh	600mAh
FUTK6902	6EXH FASST	2.4GHz	R617FS	(4) S3001	600mAh	1000mAh

4PK

4-Channel Computer System

Form and function combine to create the ultimate racer's radio: the 2.4GHz 4PK. Its ergonomic design provides the extra comfort you need to tackle grueling mains, and a rear-mounted, backlit LCD lets you monitor race progress. Benefits such as cutting-edge 2048 resolution, FASST dependability and an Advanced Positioning Adapter for fine-tuning your preferred "feel" ensures that the 2.4GHz 4PK is the system you need to stay a lap ahead of the competition.

4PK System Overview

- 40-model memory
- 10-character model naming
- Assignable switches & dials/ functions
- Assignable 3rd and 4th channels
- Customizable menus/functions: New Driver (22)/Race-Ready (30)/ Expert (36)/'Big Car' (28)
- 2 programmable mixes
- 2048 resolution
- ESC Link
- 2 conditions
- Servo Monitor Display
- Direct select (for up to 8 features)
- Model copy, re-set
- Data Transfer
- Digital trims
- Sub-trims, servo reversing and EPA
- Steering speed, expo, dual rates (2) and tension

- Throttle VTR, acceleration, speed, expo, mode and 5-point curve
- Electronic and mechanical ATL (brake side only)
- ABS braking w/adjustable return, pulse cycle and delay settings
- Advanced Positioning Adapter (APA)
- Adjustable trigger location
- Fail-safe & battery fail-safe
- Power-off, mixing and high/low voltage alarms
- Brake mixing
- Boat mode
- Idle up
- Vibrating alert system
- Backlit LCD screen with adjustable contrast and backlight on/off
- Up/down, fuel, system & lap timers (100-lap memory)
- Start function/engine cut
- Right-/left-hand use
- Servo response mode

FUTM5540	Short Drop Down
FUTM5541	Angle Adapter
FUTM5542	Screen Protector
FUTP1012	Metal Carrying Case

Stock #	System	Band	Receiver	Tx NiMH
FUTK4900	4PK FASST	2.4GHz	R604FS	1700mAh

3-Channel Computer Systems

2 choices in unmatched versatility.

Their differences are obvious, but the advantages are virtually identical. You can tailor setups with menus, store them in memory, assign a function to the 3rd channel — and create two custom mixes all your own. With it all, you get the unique advantages of FASST 2.4GHz technology: incredible resolution; spectacular speed; and almost unlimited flexibility. Available in the competition-quality 3PKS pistol and the 3VCS for modelers who prefer the feel of a 2-stick system.

3PKS

3VCS

3PKS & 3VCS

Features

- 2 programmable mixes
- Assignable 3rd channel
- Assignable switches & dials/functions
- Digital trims and dials
- Backlit LCD w/adjustable contrast
- Model copy, clear and re-set
- 10-character model naming
- ESC Setup for direct programming of ESCs
- Direct Select for fast access to the features you use most
- Servo Monitor Display
- Capable of FM/PPM, HRS and 2.4GHz operation
- Sub-trims, servo reversing and EPA
- Throttle expo, VTR, 5-point curve start, acceleration & mode select
- Steering expo, dual rates 1 and 2

- Adjustable servo speed on throttle and steering
- Idle-up
- Traction control
- Mechanical and electronic ATL
- ABS Braking w/on/off and adjustable return, pulse cycle and delay
- Fail-safe and battery fail-safe (in HRS, PCM & FASST modes)
- Independent front/rear brake mixing w/ delay

Also included: up/down, system and lap timers; 99-lap memory; alarm w/selectable tones; 7-LED status monitor; tilt mixing (boats); and DSC (cord sold separately).

3PKS Specifics

- **Customizable Menus/Functions:** New Driver (22), "Race-Ready" (30), "Expert" (36) and "Big Car" (28)
- Expandable 20-model memory*
- APA (Advanced Positioning Adapter)
- Also: vibrating alert system; adjustable wheel tension; right-/left-hand use; Tx NiCd and charger.

FUTM9405 CAMPac 8 Data Module 16K
FUTM5547 3PK Large Hand Grip
FUTM1468 9.6V 1100mAh NiCd Tx Batt

3VCS Specifics

- **Customizable Menus/Functions:** New Driver (12), "Race-Ready" (24) and "Expert" (35)
- Expandable 10-model memory*
- Adjustable stick tension & angle

* Optional 16K CAMPac module stores 10 additional memories

Stock #	System	Band	Receiver	Tx NiCd	Tx Module
FUTK2015	3PKS FASST	2.4GHz	R603FS	700mAh	PK-FSM2.4G
FUTK3000	3VCS FASST	2.4GHz	R603FS	—	PK-FSM2.4G

2 options in 2.4GHz affordability.

FASST 2.4GHz technology, computer control and three-channel versatility all make the 3PM the ideal upgrade radio for stepping up from the 2-channel systems included with many ready-to-run vehicles. A long list of features and six programmable switches help you fine-tune model performance to suit any track condition or driving style. Like the 3PM, the 3GR-FS is dedicated to 2.4GHz — and it offers virtually every feature of the 3PM in the stick radio layout many modelers prefer. For airplane pilots wanting to race cars, trucks and boats, it offers familiarity plus the speed and precision of FASST technology.

3PM

3GR-FS

3PM & 3GR-FS

Features

- 1 programmable mix
- 10-model memory
- Model naming
- Assignable switches/functions
- Assignable 3rd channel
- Digital trims
- Model copy and re-set
- Modulation mode select
- Sub-trims, servo reversing and endpoint adjustment
- Throttle expo, mode select and acceleration

- Steering expo, dual rates and servo speed
- Throttle and battery fail-safes
- ABS braking with return, pulse cycle and delay
- Brake mixing for larger models
- Electronic ATL
- 2 Conditions
- Up/down timer w/100-lap memory
- Low battery alarm
- Charge Jack (for optional NiCd)

3PM Specifics

- Wheel tension adjustment
- Mechanical/Electreonic ATL
- Set-up instructions for Traxxas® T-Maxx® and HPI Racing® Savage™ trucks

3GR-FS Specifics

- Stick length adjustment
- Throttle mode select
- Compatible with the optional R603FS receiver to allow for Dual Antenna Diversity

Stock #	System	Band	Receiver
FUTK2020	3PM FASST	2.4GHz	R603FF
FUTK3010	3GR-FS FASST	2.4GHz	R603FF

2.4GHz FASST™ Receivers

Choose from a large selection — all of them compact, with no-hassle installation!

• FASST receivers are easy to install, and do not require additional "satellite" receivers — one compact, lightweight component does it all

• FASST receivers do away with separate binding plugs that can be misplaced

• From the smallest park flyer to the largest scale giant, there's a FASST receiver that's perfect for your aircraft, car or boat!

R6004FF 4-Channel Micro Indoor (Standard Connector)
Dimensions: 1-3/8 x 13/16 x 5/16 in (35 x 20 x 8 mm)
Weight: 0.15 oz (3.9 g); Weight w/o case: 0.12 oz (3.3 g)
FUTL7624

R6014FS 14-Channel
Dimensions: 2-1/16 x 1-1/2 x 5/8 in (52 x 38 x 16 mm)
Weight: 0.72 oz (20.8 g)
FUTL7644

R616FFM 6-Channel Micro Park Flyer
Dimensions: 1-1/2 x 7/8 x 1/4 in (39 x 23 x 8 mm)
Weight: 0.22 oz (6.3 g); Weight w/o case: 0.14 oz (4.0 g)
FUTL7626

R617FS 7-Channel
Dimensions: 1-9/16 x 1-1/16 x 3/8 in (42 x 28 x 9 mm)
Weight: 0.33 oz (9.32 g); Weight w/o case: 0.22 oz (6.37 g)
FUTL7627

R6008HS 8-Channel High-Speed
Dimensions: 1-3/4 x 7/8 x 1/2 in (47 x 25 x 14 mm)
Weight: 0.48 oz (13.54 g); Weight w/o case: 0.33 oz (9.32 g)
FUTL7639

FASSTPaks™

- *The quick and easy way to get the receiver and servos you want*
- *Ideal for anyone who wants to use one transmitter with multiple models*
- *The most popular combinations for surface and air systems — in one convenient, money-saving package!*

R603FF 3-Channel Surface
Dimensions: 1-1/2 x 1 x 9/16 in (39 x 26 x 14 mm)
Weight: 0.45 oz (13 g)
FUTL7631

FUTL1170

R603FS 3-Channel Surface
Dimensions: 1-1/2 x 1 x 9/16 in (39 x 26 x 14 mm)
Weight: 0.5 oz (14 g)
FUTL7630

R604FS 4-Channel Surface
Dimensions: 1-9/16 x 1 x 9/16 in (39 x 26 x 14 mm)
Weight: 0.49 oz (14 g)
FUTL7634

FASSTPaks - Air					
Stock #	Receiver	Servo(s)	Nicd	Switch Harness	Aileron Extension
FUTL1160	R616FFM	(3) S3114M			
FUTL1161	R616FFM	(3) S3157M			
FUTL1162	R617FS	(3) S3114			
FUTL1163	R617FS	(3) S3157			
FUTL1170	R617FS	(4) S3004	4.8V 600 mAh	•	•
FUTL1171	R617FS	(5) S3001	4.8V 1000 mAh	•	•
FUTL1172	R6008HS	(4) S3004	4.8V 600 mAh	•	•
FUTL1173	R6008HS	(4) S3151	4.8V 1000 mAh	•	•

FUTL1133

FASSTPaks - Surface			
Stock #	Receiver	Servo(s)	Switch Harness
FUTL1120	R603FF	(2) S3004	•
FUTL1121	R603FF	(2) S3010	•
FUTL1130	R603FS	(1) S9452	
FUTL1131	R603FS	(1) S9350	
FUTL1132	R603FS	(1) BLS451	
FUTL1133	R603FS	(1) BLS452	
FUTL1140	R603FS	(2) S9351	•
FUTL1141	R603FS	(2) BLS351	•
FUTL1143	R603FS	(1) BLS351 (1) BLS352	•

Brushless Servos

The first — and still the best...

In 2007, Futaba introduced its first brushless servo, the BLS251. We were the first brand to combine the benefits of digital (improved precision, resolution, accuracy and holding power) with the benefits of brushless motors (longer-lasting, vibration-resistant, more efficiency and less maintenance).

In just two years' time, that single servo has expanded to 16 cutting-edge servo choices. And if you want further proof of our commitment to being first, we're already introducing our *second* generation of brushless servos. Futaba brushless servos: the first – and still the best.

...Outlasts brushed servos 5:1!

Brushless benefits:

• 30% faster response times

• Greater resistance to jolts and vibration

• Smoother operation – thanks to dual bearings and strong Samarium Cobalt magnets

• Same power consumption as brushed digital servos

• Same compact case size as standard servos

• Exceptionally durable geartrain

Specialty

BLS154 Low-Profile Aileron

Volts	Torque		Speed
4.8V	97 oz-in (7.0 kg/cm)		0.14 sec/60°
6.0V	—		—
Dimensions		**Weight**	
1-7/8 x 1-1/16 x 1 in (48 x 27 x 25 mm)		2.1 oz (58 g)	
FUTM0514		2BB	WP BLS

Mini/Micro

BLS153 Mini Air

Volts	Torque		Speed
4.8V	67 oz-in (4.8 kg/cm)		0.15 sec/60°
6.0V	—		—
Dimensions		**Weight**	
1-3/8 x 9/16 x 1-1/8 in (36 x 15 x 29 mm)		1.1 oz (30 g)	
FUTM0513		2BB	BLS

BLS257 Mini Heli

Volts	Torque		Speed
4.8V	31 oz-in (2.2 kg/cm)		0.07 sec/60°
6.0V	—		—
Dimensions		**Weight**	
1-3/8 x 9/16 x 1-1/8 in (36 x 15 x 29 mm)		1.1 oz (30 g)	
FUTM0527		2BB	BLS

BLS651 Mini Car

Volts	Torque		Speed
4.8V	—		—
6.0V	85 oz-in (6.1 kg/cm)		0.12 sec/60°
Dimensions		**Weight**	
1-3/8 x 9/16 x 1-1/8 in (36 x 15 x 29 mm)		1.1 oz (30 g)	
FUTM0567		2BB	BLS

BLS251 Heli Rudder

Volts	Torque		Speed
4.8V	53 oz-in (3.8 kg/cm)		0.06 sec/60°
6.0V	—		—
Dimensions		**Weight**	
1-9/16 x 13/16 x 1-7/16 in (40 x 20 x 37 mm)		2.2 oz (61 g)	
FUTM0521		2BB MG	WP BLS MCC

BLS254 Heli Rudder

Volts	Torque		Speed
4.8V	53 oz-in (3.8 kg/cm)		0.06 sec/60°
6.0V	—		—
Dimensions		**Weight**	
1-9/16 x 13/16 x 1-7/16 in (40 x 20 x 37 mm)		1.9 oz (54 g)	
FUTM0524		2BB	WP BLS

BLS551 Low-Profile Car

Volts	Torque		Speed
4.8V	—		—
6.0V	128 oz-in (9.2 kg/cm)		0.10 sec/60°
Dimensions		**Weight**	
1-9/16 x 13/16 x 1in (41 x 20 x 25 mm)		1.6 oz (44 g)	
FUTM0564		2BB MG	WP BLS

BB = Ball Bearing   MG = Metal Gear   WP = Water Protected   BLS = Brushless Motor   MCC = Metal Center Case

Standard

BLS151 Standard Air

Volts	Torque	Speed
4.8V	122 oz-in (8.8 kg/cm)	0.15 sec/60°
6.0V	—	—
Dimensions		**Weight**
1-9/16 x 13/16 x 1-3/8 in (40 x 20 x 35 mm)		1.6 oz (46 g)

FUTM0511 | 2BB | | WP | BLS |

BLS152 Super High-Torque Air

Volts	Torque	Speed
4.8V	—	—
6.0V	431 oz-in (31.0 kg/cm)	0.14 sec/60°
Dimensions		**Weight**
1-9/16 x 13/16 x 1-1/2 in (41 x 21 x 38 mm)		2.6 oz (73 g)

FUTM0512 | 2BB | MG | WP | BLS | MCC |

BLS155 High-Torque Air

Volts	Torque	Speed
4.8V	—	—
6.0V	250 oz-in (18.0 kg/cm)	0.15 sec/60°
Dimensions		**Weight**
1-9/16 x 13/16 x 1-7/16 in (40 x 20 x 37 mm)		2.3 oz (64 g)

FUTM0515 | 2BB | MG | WP | BLS | MCC |

BLS252 F3C Heli

Volts	Torque	Speed
4.8V	139 oz-in (10.0 kg/cm)	0.16 sec/60°
6.0V	175 oz-in (12.6 kg/cm)	0.13 sec/60°
Dimensions		**Weight**
1-9/16 x 13/16 x 1-7/16 in (40 x 20 x 37 mm)		2.1 oz (58 g)

FUTM0522 | 2BB | MG | WP | BLS |

BLS253 3D Heli

Volts	Torque	Speed
4.8V	117 oz-in (8.4 kg/cm)	0.13 sec/60°
6.0V	147 oz-in (10.6 kg/cm)	0.10 sec/60°
Dimensions		**Weight**
1-9/16 x 13/16 x 1-1/2 in (40 x 20 x 37 mm)		2.0 oz (58 g)

FUTM0523 | 2BB | MG | WP | BLS |

BLS351 High-Torque

Volts	Torque	Speed
4.8V	173 oz-in (12.5 kg/cm)	0.16 sec/60°
6.0V	217 oz-in (15.6 kg/cm)	0.13 sec/60°
Dimensions		**Weight**
1-9/16 x 13/16 x 1-3/8 in (40 x 20 x 37 mm)		2.2 oz (63 g)

FUTM0551 | 2BB | MG | WP | BLS | MCC |

BLS451 High-Speed

Volts	Torque	Speed
4.8V	118 oz-in (8.5 kg/cm)	0.13 sec/60°
6.0V	147 oz-in (10.6 kg/cm)	0.10 sec/60°
Dimensions		**Weight**
1-9/16 x 13/16 x 1-7/16 in (40 x 20 x 37 mm)		2.1 oz (58 g)

FUTM0552 | 2BB | MG | WP | BLS |

BLS452 High-Torque EP Car

Volts	Torque	Speed
4.8V	156 oz-in (11.2 kg/cm)	0.18 sec/60°
6.0V	194 oz-in (14.0 kg/cm)	0.14 sec/60°
Dimensions		**Weight**
1-9/16 x 13/16 x 1-7/16 in (40 x 20 x 37 mm)		2.1 oz (58 g)

FUTM0553 | 2BB | MG | WP | BLS |

BLS352 High-Torque

Volts	Torque	Speed
4.8V	200 oz-in (14.4 kg/cm)	0.19 sec/60°
6.0V	250 oz-in (18.0 kg/cm)	0.15 sec/60°
Dimensions		**Weight**
1-9/16 x 13/16 x 1-7/16 in (40 x 20 x 37 mm)		2.2 oz (63 g)

FUTM0554 | 2BB | MG | WP | BLS | MCC |

Digital Servos

The Digital Decade

When we introduced digital servos in 1999 we weren't trying to start a revolution. We were just trying to give competitive pilots and drivers a performance edge

Digital servos were the answer — and their higher pulse rate was the key. It means that digital servos will respond five times before an analog servo can respond even once. Deadband virtually disappears and resolution increases. As a result, digital servos respond faster, hold stronger and center more accurately than the analog servos you've used in the past.

The S9250 and S9450 have been retired, but they've been replaced by a line-up of almost three dozen next-gen digitals. New models include micros with metal gears and giant-scale workhorses. Specialized servos for heli rudders, ailerons and gyros, as well as all-purpose servos and sport servos. Tiny, 7.9 g minis with 21 ounce-inches of torque as well as standard servos that deliver 425 ounce-inches of torque in just fourteen hundredths of a second.

For revolutionary response and power — Futaba digital servos.

Mini/Micro

S3150 Slim Wing

Volts	Torque	Speed
4.8V	51 oz-in (3.7 kg/cm)	0.24 sec/60°
6.0V	n/a	n/a

Dimensions	Weight
1-3/16 x 1-7/16 x 1-1/8 in (30 x 11 x 29 mm)	0.81 oz (23 g)

UTM0303 — 2BB MG 3P

S3153 Micro

Volts	Torque	Speed
4.8V	19 oz-in (1.4 kg/cm)	0.12 sec/60°
6.0V	24 oz-in (1.7 kg/cm)	0.10 sec/60°

Dimensions	Weight
7/8 x 3/8 x 1-13/16 in (22 x 11 x 20 mm)	0.34 oz (9.6 g)

FUTM0653 — BB 3P

S3155 High-Speed Slim

Volts	Torque	Speed
4.8V	28 oz-in (2.0 kg/cm)	0.16 sec/60°
6.0V	n/a	n/a

Dimensions	Weight
1-3/16 x 1-7/16 x 1-1/8 in (30 x 11 x 29 mm)	0.72 oz (20 g)

FUTM0655 — 2BB MG 3P

S3157 High-Torque High-Speed Micro

Volts	Torque	Speed
4.8V	21 oz-in (1.5 kg/cm)	0.10 sec/60°
6.0V	24 oz-in (1.7 kg/cm)	0.09 sec/60°

Dimensions	Weight
7/8 x 3/8 x 7/8 in (22 x 11 x 23 mm)	0.29 oz (8.3 g)

FUTM0657 — 3P

S9070 Programmable Mini

Volts	Torque	Speed
4.8V	63 oz-in (4.5 kg/cm)	0.18 sec/60°
6.0V	76 oz-in (5.5 kg/cm)	0.15 sec/60°

Dimensions	Weight
1-3/8 x 3/8 x 1in (36 x 20 x 25 mm)	1.1 oz (32 g)

FUTM0150 — 2BB MG CM

S3153MG Micro

Volts	Torque	Speed
4.8V	19 oz-in (1.4 kg/cm)	0.13 sec/60°
6.0V	24 oz-in (1.7 kg/cm)	0.11 sec/60°

Dimensions	Weight
7/8 x 3/8 x 1-13/16 in (22 x 11 x 20 mm)	0.38 oz (11 g)

FUTM0652 — BB MG 3P

S3154 High-Torque High-Speed Micro

Volts	Torque	Speed
4.8V	21 oz-in (1.5 kg/cm)	0.10 sec/60°
6.0V	24 oz-in (1.7 kg/cm)	0.09 sec/60°

Dimensions	Weight
7/8 x 3/8 x 1-13/16 in (22 x 11 x 20 mm)	0.28 oz (7.9 g)

FUTM0654 — 3P

S3156MG Micro

Volts	Torque	Speed
4.8V	28 oz-in (2.0 kg/cm)	0.13 sec/60°
6.0V	33 oz-in (2.4 kg/cm)	0.11 sec/60°

Dimensions	Weight
7/8 x 3/8 x 7/8 in (22 x 11 x 22 mm)	0.32 oz (9.3 g)

FUTM0656 — BB MG 3P

S3157M Micro w/Micro Plug

Volts	Torque	Speed
4.8V	21 oz-in (1.5 kg/cm)	0.10 sec/60°
6.0V	24 oz-in (1.7 kg/cm)	0.09 sec/60°

Dimensions	Weight
7/8 x 3/8 x 7/8 in (22 x 11 x 23 mm)	0.28 oz (7.8 g)

FUTM0705 — 3P

S9650 Mini

Volts	Torque	Speed
4.8V	50 oz-in (3.6 kg/cm)	0.14 sec/60°
6.0V	63 oz-in (4.5 kg/cm)	0.11sec/60°

Dimensions	Weight
1-3/8 x 9/16 x 1-1/8 in (36 x 15 x 29 mm)	0.92 oz (26 g)

FUTM0260 — 2BB CM

Standard

S3050 High-Torque Standard

Volts	Torque	Speed
4.8V	72 oz-in (5.2 kg/cm)	0.20 sec/60°
6.0V	90 oz-in (6.5 kg/cm)	0.16 sec/60°

Dimensions	Weight
1-9/16 x 3/8 x 1-1/2 in (40 x 20 x 38 mm)	1.7 oz (49 g)

FUTM0300 — 2BB MG 3P

S3152 High-Torque

Volts	Torque	Speed
4.8V	70 oz-in (5.0 kg/cm)	0.22 sec/60°
6.0V	88 oz-in (6.3 kg/cm)	0.18 sec/60°

Dimensions	Weight
1-9/16 x 3/8 x 1-1/2 in (40 x 20 x 38 mm)	1.5 oz (41 g)

FUTM0311 — BB 3P

S9155 High-Torque Air

Volts	Torque	Speed
4.8V	153 oz-in (11.0 kg/cm)	0.16 sec/60°
6.0V	192 oz-in (13.8 kg/cm)	0.13 sec/60°

Dimensions	Weight
1-9/16 x 3/8 x 1-7/16 in (40 x 20 x 37 mm)	2.2 oz (61 g)

FUTM0215 — 2BB MG WP CM MCC

S9250 Heli

Volts	Torque	Speed
4.8V	76 oz-in (5.5 kg/cm)	0.11 sec/60°
6.0V	n/a	n/a

Dimensions	Weight
1-5/8 x 1-13/16 x 1-1/2 in (41 x 20 x 38 mm)	1.9 oz (54 g)

FUTM0220 — 2BB MG WP CM

S9350 High-Torque

Volts	Torque	Speed
4.8V	111 oz-in (8.0 kg/cm)	0.15 sec/60°
6.0V	139 oz-in (10.0 kg/cm)	0.12 sec/60°

Dimensions	Weight
1-5/8 x 1-13/16 x 1-7/16 in (40 x 20 x 37 mm)	2.2 oz (61 g)

FUTM0235 — 2BB MG WP CM MCC

BB = Ball Bearing   MG = Metal Gear   WP = Water Protected   CM = Coreless Motor   3P = 3-pole Motor   5P = 5-pole Motor   MCC = Metal Center Case

Large/Specialty

The S9250 (and its surface counterpart, the S9450) gave modelers a first look at what digital servos could do.

S3170G Planetary Gear Retract

Volts	Torque		Speed
4.8V	94 oz-in (7.0 kg/cm)		0.57 sec/60°
6.0V	118 oz-in (8.5 kg/cm)		0.47 sec/60°
Dimensions		Weight	
1-3/8 x 5/8 x 1 in (35 x 16 x 26 mm)		0.9 oz (26 g)	
FUTM0671	2BB MG	3P	

S9150 Low-Profile Aileron

Volts	Torque		Speed
4.8V	81 oz-in (5.8 kg/cm)		0.18 sec/60°
6.0V	n/a		n/a
Dimensions		Weight	
1-7/8 x 1-1/16 x 1 in (48 x 27 x 25 mm)		1.9 oz (53 g)	
FUTM0210	2BB	WP CM	

S9152 Mega High-Torque

Volts	Torque		Speed
4.8V	222 oz-in (16.0 kg/cm)		0.23 sec/60°
6.0V	278 oz-in (20.0 kg/cm)		0.19 sec/60°
Dimensions		Weight	
1-15/16 x 1 x 1-9/16 in (49 x 25 x 40 mm)		3.0 oz (85 g)	
FUTM0212	2BB MG WP	CM MCC	

S9153 High-Torque High-Speed

Volts	Torque		Speed
4.8V	167 oz-in (12.0 kg/cm)		0.18 sec/60°
6.0V	208 oz-in (15.0 kg/cm)		0.15 sec/60°
Dimensions		Weight	
1-15/16 x 1 x 1-9/16 in (49 x 25 x 40 mm)		3.0 oz (85 g)	
FUTM0213	2BB MG WP	CM MCC	

S9154 High-Speed Low-Profile Aileron

Volts	Torque		Speed
4.8V	64 oz-in (4.6 kg/cm)		0.14 sec/60°
6.0V	n/a		n/a
Dimensions		Weight	
1-7/8 x 1-1/16 x 1 in (48 x 27 x 25 mm)		1.9 oz (53 g)	
FUTM0214	2BB	WP CM	

S9251 For GY601/GY611 Gyro

Volts	Torque		Speed
4.8V	51 oz-in (3.7 kg/cm)		0.07 sec/60°
6.0V	n/a		n/a
Dimensions		Weight	
1-5/8 x 1-13/16 x 1-7/16 in (40 x 20 x 37 mm)		2.0 oz (57 g)	
FUTM0221	2BB MG WP	CM MCC	

S9254 High-Torque High-Speed Heli

Volts	Torque		Speed
4.8V	47 oz-in (3.4 kg/cm)		0.06 sec/60°
6.0V	n/a		n/a
Dimensions		Weight	
1-5/8 x 1-13/16 x 1-7/16 in (40 x 20 x 37 mm)		1.7 oz (49 g)	
FUTM0224	2BB	WP CM	

S9256 High-Speed for GY601/GY611 Gyro

Volts	Torque		Speed
4.8V	47 oz-in (3.4 kg/cm)		0.06 sec/60°
6.0V	n/a		n/a
Dimensions		Weight	
1-5/8 x 1-13/16 x 1-7/16 in (40 x 20 x 37 mm)		2.0 oz (57 g)	
FUTM0226	2BB MG WP	CM MCC	

S3151 Sport

Volts	Torque		Speed
4.8V	43 oz-in (3.1 kg/cm)		0.21 sec/60°
6.0V	n/a		n/a
Dimensions		Weight	
1-9/16 x 3/8 x 1-7/16 in (41 x 20 x 36 mm)		1.5 oz (42 g)	
FUTM0310	BB	3P	

S9151 Rudder

Volts	Torque		Speed
4.8V	132 oz-in (9.5 kg/cm)		0.19 sec/60°
6.0V	n/a		n/a
Dimensions		Weight	
1-9/16 x 3/8 x 1-7/16 in (40 x 20 x 37 mm)		1.8 oz (50 g)	
UTM0211	2BB	WP CM	

S9156 High-Torque Air

Volts	Torque		Speed
4.8V	272 oz-in (19.6 kg/cm)		0.21 sec/60°
6.0V	340 oz-in (24.5 kg/cm)		0.17 sec/60°
Dimensions		Weight	
1-9/16 x 3/8 x 1-7/16 in (40 x 20 x 37 mm)		2.2 oz (63 g)	
FUTM0216	2BB MG WP	CM MCC	

S9157 High-Torque

Volts	Torque		Speed
4.8V	n/a		n/a
6.0V	425 oz-in (30.6 kg/cm)		0.14 sec/60°
Dimensions		Weight	
1-9/16 x 13/16 x 1-1/2 in (41 x 21 x 37 mm)		2.5 oz (71 g)	
UTM0217	2BB MG WP	CM MCC	

S9257 EP Heli Rudder

Volts	Torque		Speed
4.8V	28 oz-in (2.0 kg/cm)		0.08 sec/60°
6.0V	n/a		n/a
Dimensions		Weight	
1-3/8 x 9/16 x 1-1/8 in (36 x 15 x 29 mm)		0.92 oz (26 g)	
FUTM0667	2BB	CM	

S9252 All-Purpose

Volts	Torque		Speed
4.8V	92 oz-in (6.6 kg/cm)		0.14 sec/60°
6.0V	n/a		n/a
Dimensions		Weight	
1-5/8 x 1-13/16 x 1-7/16 in (40 x 20 x 37 mm)		1.8 oz (50 g)	
FUTM0222	2BB MG WP	CM	

S9255 High-Torque Heli

Volts	Torque		Speed
4.8V	125 oz-in (9.0 kg/cm)		0.16 sec/60°
6.0V	n/a		n/a
Dimensions		Weight	
1-5/8 x 1-13/16 x 1-7/16 in (40 x 20 x 37 mm)		1.9 oz (55 g)	
UTM0225	2BB MG WP	CM	

S9452 High-Torque High-Speed

Volts	Torque		Speed
4.8V	102 oz-in (7.4 kg/cm)		0.13 sec/60°
6.0V	128 oz-in (9.2 kg/cm)		0.11 sec/60°
Dimensions		Weight	
1-5/8 x 1-13/16 x 1-5/16 in (40 x 20 x 34 mm)		1.8 oz (50 g)	
FUTM0662	2BB MG WP	CM	

S9351 High-Torque

Volts	Torque		Speed
4.8V	153 oz-in (11.0 kg/cm)		0.16 sec/60°
6.0V	192 oz-in (13.8 kg/cm)		0.13 sec/60°
Dimensions		Weight	
1-5/8 x 1-13/16 x 1-7/16 in (40 x 20 x 37 mm)		2.2 oz (61 g)	
UTM0236	2BB MG WP	CM MCC	

S5050 High-Torque

Volts	Torque		Speed
4.8V	211 oz-in (15.2 kg/cm)		0.25 sec/60°
6.0V	264 oz-in (19.0 kg/cm)		0.20 sec/60°
Dimensions		Weight	
2-5/16 x 1-18 x 1-15/16 in (59 x 29 x 50 mm)		4.5 oz (127 g)	
FUTM0255	2BB MG WP	CM	

S9551 Low-Profile

Volts	Torque		Speed
4.8V	98 oz-in (7.0 kg/cm)		0.14 sec/60°
6.0V	122 oz-in (8.8 kg/cm)		0.11 sec/60°
Dimensions		Weight	
1-5/8 x 1-13/16 x 1in (41 x 20 x 25 mm)		1.6 oz (45 g)	
FUTM0661	2BB MG WP	CM	

Analog Servos

Power and speed for every R/C application.

For any type of radio-controlled model, Futaba has the ideal servo. That holds true whether the application requires a special size, specific torque or faster speed. Whatever the function, there's a Futaba servo to meet it — housed in an impact- and fuel-resistant case to protect your investment.

Mini/Micro

S3111 Micro

Volts	Torque	Speed
4.8V	8.3 oz-in (0.6 kg/cm)	0.12 sec/60°
6.0V	—	—
Dimensions		**Weight**
7/8 x 7/16 x 3/4 in (22 x 11 x 20 mm)		0.23 oz (6.3 g)
FUTM0047		3P

S3111M Micro w/Micro Plug

Volts	Torque	Speed
4.8V	8.3 oz-in (0.6 kg/cm)	0.12 sec/60°
6.0V	—	—
Dimensions		**Weight**
7/8 x 7/16 x 3/4 in (22 x 11 x 20 mm)		0.22 oz (6.3 g)
FUTM0703		3P

S3114 High-Torque Micro

Volts	Torque	Speed
4.8V	21 oz-in (1.5 kg/cm)	0.10 sec/60°
6.0V	24 oz-in (1.7 kg/cm)	0.09 sec/60°
Dimensions		**Weight**
7/8 x 7/16 x 3/4 in (22 x 11 x 20 mm)		0.28 oz (7.8 g)
FUTM0414		3P

S3115 Precision Micro

Volts	Torque	Speed
4.8V	39 oz-in (2.8 kg/cm)	0.15 sec/60°
6.0V	—	—
Dimensions		**Weight**
1-1/8 x 1/2 x 1-3/16 in (28 x 13 x 30 mm)		0.60 oz (17 g)
FUTM0415		3P

S9002 Coreless Mini

Volts	Torque	Speed
4.8V	34 oz-in (2.5 kg/cm)	0.18 sec/60°
6.0V	43 oz-in (3.1 kg/cm)	0.14 sec/60°
Dimensions		**Weight**
1/4 x 5/8 x 3/16 in (31 x 16 x 31 mm)		1.1 oz (31 g)
FUTM0076	2BB	CM

S3002 Mini

Volts	Torque	Speed
4.8V	37 oz-in (2.6 kg/cm)	0.25 sec/60°
6.0V	46 oz-in (3.3 kg/cm)	0.20 sec/60°
Dimensions		**Weight**
1-1/4 x 5/8 x 1-3/16 in (31 x 16 x 30 mm)		1.2 oz (35 g)
FUTM0030	2BB MG	3P

S3102 Micro Aircraft

Volts	Torque	Speed
4.8V	51 oz-in (3.7 kg/cm)	0.25 sec/60°
6.0V	64 oz-in (4.6 kg/cm)	0.20 sec/60°
Dimensions		**Weight**
1-1/8 x 1/2 x 1-3/16 in (28 x 13 x 30 mm)		0.74 oz (21 g)
FUTM0034	MG	3P

S3107 Micro

Volts	Torque	Speed
4.8V	17 oz-in (1.2 kg/cm)	0.12 sec/60°
6.0V	—	—
Dimensions		**Weight**
7/8 x 7/16 x 3/4 in (22 x 11 x 20 mm)		0.32 oz (9.0 g)
FUTM0025		3P

S3114M High-Torque Micro w/Micro Plug

Volts	Torque	Speed
4.8V	21 oz-in (1.5 kg/cm)	0.10 sec/60°
6.0V	24 oz-in (1.7 kg/cm)	0.09 sec/60°
Dimensions		**Weight**
7/8 x 7/16 x 3/4 in (22 x 11 x 20 mm)		0.26 oz (7.5 g)
FUTM0704		3P

S3117 High-Torque Mini/Micro

Volts	Torque	Speed
4.8V	21 oz-in (1.5 kg/cm)	0.10 sec/60°
6.0V	24 oz-in (1.7 kg/cm)	0.09 sec/60°
Dimensions		**Weight**
7/8 x 7/16 x 15/16 in (22 x 11 x 23 mm)		0.30 oz (8.5 g)
FUTM0417		3P

S9602 High-Speed Mini Air

Volts	Torque	Speed
4.8V	30 oz-in (2.2 kg/cm)	0.11 sec/60°
6.0V	38 oz-in (2.7 kg/cm)	0.09 sec/60°
Dimensions		**Weight**
1-7/16 x 9/16 x 1-3/16 in (36 x 15 x 31 mm)		1.1 oz (31 g)
FUTM0107	2BB MG	CM

Standard

S148 Precision

Volts	Torque	Speed
4.8V	33 oz-in (2.4 kg/cm)	0.28 sec/60°
6.0V	42 oz-in (3.0 kg/cm)	0.22 sec/60°
Dimensions		**Weight**
1-9/16 x 3/4 x 1-7/16 in (40 x 20 x 36 mm)		1.6 oz (44 g)
FUTM0710		3P

S3003 Standard

Volts	Torque	Speed
4.8V	44 oz-in (3.2 kg/cm)	0.23 sec/60°
6.0V	57 oz-in (4.1 kg/cm)	0.19 sec/60°
Dimensions		**Weight**
1-9/16 x 3/4 x 1-7/16 in (40 x 20 x 36 mm)		1.3 oz (37 g)
FUTM0031		3P

S3305 High-Torque Standard

Volts	Torque	Speed
4.8V	99 oz-in (7.1 kg/cm)	0.25 sec/60°
6.0V	124 oz-in (8.9 kg/cm)	0.20 sec/60°
Dimensions		**Weight**
1-9/16 x 3/4 x 1-1/2 in (40 x 20 x 38 mm)		1.7 oz (47 g)
FUTM0045	2BB MG	3P

S9001 Aircraft

Volts	Torque	Speed
4.8V	54 oz-in (3.9 kg/cm)	0.22 sec/60°
6.0V	72 oz-in (5.2 kg/cm)	0.18 sec/60°
Dimensions		**Weight**
1-9/16 x 3/4 x 1-7/16 in (40 x 20 x 36 mm)		1.7 oz (48 g)
FUTM0075	2BB	CM

S9202 Aircraft

Volts	Torque	Speed
4.8V	56 oz-in (4.0 kg/cm)	0.27 sec/60°
6.0V	69 oz-in (5.0 kg/cm)	0.22 sec/60°
Dimensions		**Weight**
1-9/16 x 13/16 x 1-3/8 in (41 x 20 x 36 mm)		1.8 oz (50 g)
FUTM0090	2BB	WP CM

S9402 High-Speed

Volts	Torque	Speed
4.8V	89 oz-in (6.4 kg/cm)	0.12 sec/60°
6.0V	111 oz-in (8.0 kg/cm)	0.10 sec/60°
Dimensions		**Weight**
1-9/16 x 13/16 x 1-1/2 in (41 x 20 x 38 mm)		1.9 oz (55 g)
FUTM0102	2BB MG	WP CM

BB = Ball Bearing   MG = Metal Gear   WP = Water Protected   CM = Coreless Motor   3P = 3-pole Motor   5P = 5-pole Motor   MCC = Metal Center Case

Large/Specialty

S3001 Standard

Volts	Torque	Speed
4.8V	33 oz-in (2.4 kg/cm)	0.28 sec/60°
6.0V	42 oz-in (3.0 kg/cm)	0.22 sec/60°
Dimensions		Weight
1-9/16 x 3/4 x 1-7/16 in (40 x 20 x 36 mm)		1.6 oz (45 g)
FUTM0029	BB	3P

S3004 Standard

Volts	Torque	Speed
4.8V	44 oz-in (3.2 kg/cm)	0.23 sec/60°
6.0V	57 oz-in (4.1 kg/cm)	0.19 sec/60°
Dimensions		Weight
1-9/16 x 3/4 x 1-7/16 in (40 x 20 x 36 mm)		1.3 oz (37 g)
FUTM0004	BB	3P

S3010 High-Torque

Volts	Torque	Speed
4.8V	72 oz-in (5.2 kg/cm)	0.20 sec/60°
6.0V	90 oz-in (6.5 kg/cm)	0.16 sec/60°
Dimensions		Weight
1-9/16 x 3/4 x 1-1/2 in (40 x 20 x 38 mm)		1.5 oz (41 g)
FUTM0043	BB	3P

S9102 Low-Profile Aileron

Volts	Torque	Speed
4.8V	40 oz-in (2.9 kg/cm)	0.16 sec/60°
6.0V	50 oz-in (3.6 kg/cm)	0.13 sec/60°
Dimensions		Weight
1-13/16 x 7/8 x 1 in (45 x 23 x 26 mm)		1.6 oz (46 g)
FUTM0087	2BB	WP CM

S9206 High-Torque Heli/Airplane

Volts	Torque	Speed
4.8V	132 oz-in (9.5 kg/cm)	0.19 sec/60°
6.0V	—	—
Dimensions		Weight
1-9/16 x 13/16 x 1-1/2 in (41 x 20 x 38 mm)		1.9 oz (53 g)
FUTM0115	2BB MG	WP CM

S9405 High-Torque

Volts	Torque	Speed
4.8V	80 oz-in (5.8 kg/cm)	0.13 sec/60°
6.0V	100 oz-in (7.2 kg/cm)	0.11 sec/60°
Dimensions		Weight
1-9/16 x 13/16 x 1-1/2 in (41 x 20 x 38 mm)		1.9 oz (55 g)
FUTM0098	2BB MG	WP CM

S136G Compact Retract*

Volts	Torque	Speed
4.8V	61 oz-in (4.4 kg/cm)	0.60 sec/60°
6.0V	76 oz-in (5.5 kg/cm)	0.50 sec/60°
Dimensions		Weight
1-3/4 x 7/8 x 1 in (45 x 23 x 25 mm)		1.5 oz (42 g)
FUTM0670	2BB	WP 3P

S3302 1/4 Scale

Volts	Torque	Speed
4.8V	89 oz-in (6.4 kg/cm)	0.24 sec/60°
6.0V	111 oz-in (8.0 kg/cm)	0.19 sec/60°
Dimensions		Weight
2-5/16 x 1-1/8 x 1-15/16 in (59 x 29 x 50 mm)		3.6 oz (103 g)
FUTM0035	2BB MG WP	3P

S3801 High-Torque Sail

Volts	Torque	Speed
4.8V	156 oz-in (11.2 kg/cm)	0.32 sec/60°
6.0V	194 oz-in (14.0 kg/cm)	0.26 sec/60°
Dimensions		Weight
2-5/16 x 1-1/8 x 1-15/16 in (59 x 29 x 50 mm)		3.8 oz (107 g)
FUTM0038	2BB MG WP	3P

S5301 High-Torque 1/4 Scale

Volts	Torque	Speed
4.8V	233 oz-in (16.8 kg/cm)	0.28 sec/60°
6.0V	292 oz-in (21.0 kg/cm)	0.23 sec/60°
Dimensions		Weight
2-5/16 x 1-1/8 x 1-15/16 in (59 x 29 x 50 mm)		4.4 oz (125 g)
FUTM0051	2BB MG WP	5P

S5801 Sail Winch

Volts	Torque	Speed
6.2V	108 oz-in (7.8 kg/cm)	0.60 sec/60°
7.2V	136 oz-in (9.8 kg/cm)	0.50 sec/60°
Dimensions		Weight
1-13/16 x 1 x 1-3/4 in (46 x 25 x 44 mm)		2.9 oz (83 g)
FUTM0099	2BB MG WP	5P

S3104 1/4 Scale

Volts	Torque	Speed
4.8V	128 oz-in (9.2 kg/cm)	0.21 sec/60°
6.0V	—	—
Dimensions		Weight
2-5/16 x 1-1/8 x 1-15/16 in (59 x 29 x 50 mm)		3.3 oz (95 g)
FUTM0036	2BB	3P

S3306 High-Torque High-Speed 1/5 Scale

Volts	Torque	Speed
4.8V	267 oz-in (19.2 kg/cm)	0.20 sec/60°
6.0V	333 oz-in (24.0 kg/cm)	0.16 sec/60°
Dimensions		Weight
2-5/8 x 1-3/16 x 2-1/4 in (66 x 30 x 57 mm)		4.4 oz (126 g)
FUTM0020	2BB	WP 3P

S3802 Sail

Volts	Torque	Speed
4.8V	122 oz-in (8.8 kg/cm)	0.70 sec/60°
6.0V	153 oz-in (11.0 kg/cm)	0.56 sec/60°
Dimensions		Weight
1-3/4 x 7/8 x 1-11/16 in (44 x 23 x 43 mm)		2.5 oz (72 g)
FUTM0039	2BB MG WP	3P

S5302 High-Speed 1/4 Scale

Volts	Torque	Speed
4.8V	189 oz-in (13.6 kg/cm)	0.18 sec/60°
6.0V	236 oz-in (17.0 kg/cm)	0.15 sec/60°
Dimensions		Weight
2-5/16 x 1-1/8 x 1-15/16 in (59 x 29 x 50 mm)		4.4 oz (125 g)
FUTM0052	2BB MG WP	5P

* = 180° rotation; non-proportional

Transmitter Modules, Module/Receiver Sets

Retrofit your current Futaba™ systems for FASST results

With 2.4GHz transmitter modules and module/receiver sets, upgrading Futaba radios to cutting-edge FASST technology is a snap. Just plug the components in to enjoy performance and security that's unsurpassed — without investing in a new transmitter!

- *A perfect fit with Futaba equipment — no external wires or cables to get in the way or become disconnected*
- *Antenna is built into the module and pivots to maximize your RF link*
- *Features easy fail-safe set-up and push-button Easy Link™ receiver-to-transmitter binding*

2.4GHz Tx Module/Rx Sets
- *The perfect match of transmitter module and receiver to max out your system's performance!*

2.4GHz Modules
- *Choose from 5 different modules to convert many Futaba radios — with no transmitter modification required!*

FUTL8951   FUTL8956

FUTL8934   FUTL8930   FUTL8925

FUTL8926	R603FS/3PK Tx Module
FUTL8951	R617FS/TM-7
FUTL8952	R608FS/TM-8
FUTL8954	R6014FS/TM-10
FUTL8956	R6014FS/TM-14

FUTL8925	3PK
FUTL8927	TM-7
FUTL8928	TM-8
FUTL8930	TM-10
FUTL8934	TM-14

		Receivers - Air					
		R6004FF	**R616FFM**	**R607FS**	**R617FS**	**R608FS**	**R6008HS**	**R6014FS**
Transmitters	6EX	•	•	•	•			
	7C	•	•	•	•			
	10C/G	•	•	•	•	•	•	•
	12FG	•	•	•	•	•	•	•
	12Z	•	•	•	•	•	•	•
	14MZ	•	•	•	•	•	•	•
Modules	TM-7	•	•	•	•			
	TM-8	•	•	•	•	•	•	•
	TM-10	•	•	•	•	•	•	•
	TM-14	•	•	•	•	•	•	•

	Receivers - Surface		
Transmitters	**R603FF**	**R603FS**	**R604FS**
3PM	•	•	
3PKS	•	•	
3VCS	•	•	
3GR	•	•	
4PK	•	•	•

	Modules			
Transmitters	**TM-7**	**TM-8**	**TM-10**	**TM-14**
7U	•	•		
8U	•	•		
9C	•	•		
9Z	•	•		
10C	•	•	•	
12FG				•
12Z				•
14MZ				•

G and GY Series Gyros
First-class gyros for first-class pilots.

Pop a Futaba gyro into your favorite heli and enjoy first-class performance – each and every flight. All, from the innovative GY520 to the versatile G190, offer the unmatched stability that discerning pilots demand. It doesn't matter whether you fly an electric micro or a 3D monster, there's a Futaba gyro to suit your needs.

GY MEMS Technology

Micro ElectroMechanical System TECHNOLOGY™

Cutting-edge technology – revolutionary performance!

Futaba continues to break new ground with innovative MEMS (Micro ElectroMechanical System) sensor design. The combination of MEMS higher frame rates, ultra high-speed processing and an advanced PID control algorithm puts the GY520 a quantum leap ahead of every other heading hold gyro.

AVCS™ ANGULAR VELOCITY CONTROL SYSTEM

Exclusively from Futaba!

All Futaba MEMS and SMM (Silicon Micro Machine) gyros feature AVCS, the most positive form of tail control available. Sensors send a constant stream of data to the servo, even when the tail is at rest. This allows the gyro to automatically trim for side winds or drifts, virtually eliminating the need for pilots to perform trim changes.

GY520

FUTM0810
(shown actual size)

Dimensions: 3/4 x 3/4 x 3/8 in
Weight: 0.24 oz (6.9 g)

The smallest, lightest and most advanced gyro in the world!

- Weighs only 6.9 g — more than 9 g less than any other heli heading hold gyro
- Great for everything from electric micros to .90-size 3D monsters
- MEMS (Micro ElectroMechanical System) sensor detects smaller angle deviations than any other technology for incredible precision
- Improved, ultra high-speed processing rates and an 800°/second rate range offer faster, smoother response and consistent pirouette rates
- Delivers superior performance with analog servos — and excels with digitals!
- Push-button or PC programming

CIU-2 USB Interface

FUTM0951

Dimensions: 3/4 x 2-1/4 x 3/8 in
Weight: 0.24 oz (6.9 g)

The simple hook-up for sophisticated GY520 programming

- Requires Windows®-compatible PC w/USB port
- Free software available at futaba-rc.com

G190 Micro Piezo Gyro

Dimensions: 7/8 x 15/16 x 3/8 in
Weight: 0.24 (6.7 g)

FUTM0830

GY240 w/SMM

- AVCS/Normal Modes
- Normal/Reverse Rotation

Dimensions: 1 x 1 x 13/16 in
Weight: 0.88 oz (25 g)

FUTM0809

GY401 w/SMM

- Remote Gain*
- AVCS/Normal Modes*
- Normal/Reverse Rotation
- Digital Servo On/Off
- Travel Limit Setting
- Control Delay

Dimensions: 1 x 1 x 13/16 in
Weight: 0.95 oz (27 g)

* = transmitter-adjustable

FUTM0807
Also available: **FUTM0808** GY401 w/S9254 digital servo

GY611 Heading Hold Gyro w/SMM & S9256 Digital Servo

- ...ution, 12-bit A/D microprocessor w/760 ms pulse rate
- Program directly on the amp, or remotely through 14MZ™, 12Z, 12FG and 10C Super transmitters
- F3C/3D Flight Modes
- Normal/AVCS/CMT Modes*
- Gyro & Rudder Gain* (w/independent settings for AVCS/Normal modes)
- Gain Tracking
- Control Delay (w/independent settings for rudder stick, input and return movements)
- Low battery alarm

* = adjusts from transmitter or on amp

FUTM0825

Amp Dimensions / Weight: 2-5/16 x 1-5/16 x 5/8 in / 1.20 oz (34 g)
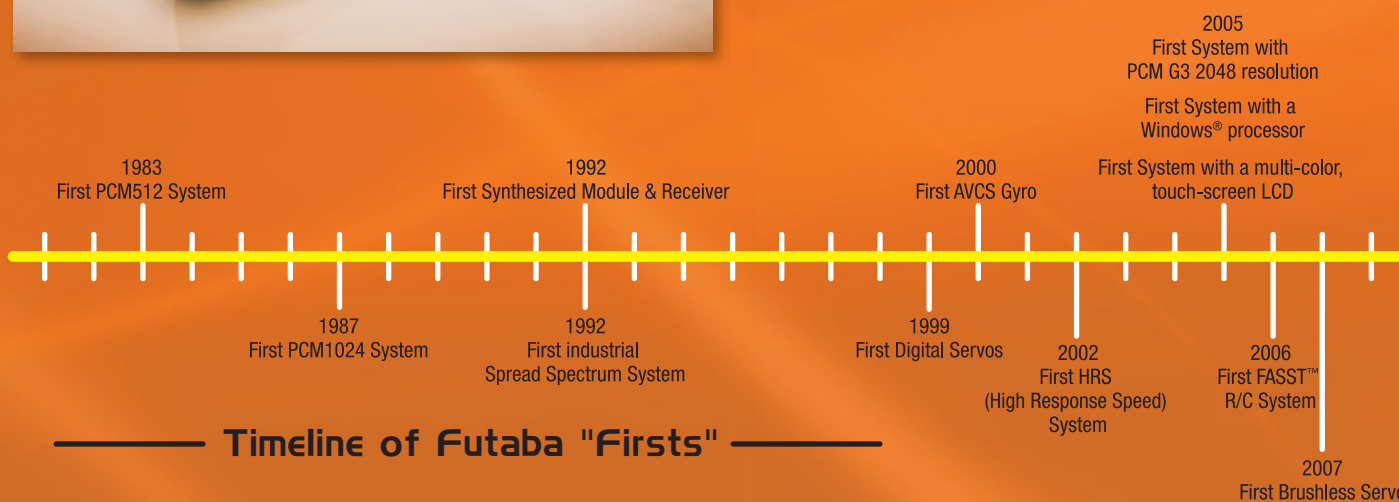**Sensor Dimensions / Weight:** 1-3/16 x 1-3/16 x 11/16 in / 1.1 oz (30 g)