

Fastrack Xtend Pocket Guide

Version: **1.1**

Last update: **2010-05-27**

[F.A.Q. section](#)



Ordering references for Fastrack Xtend

Description	Latest SKU are available in the "Product Marketing Catalog".
Select your SKU	- Identify which Fastrack Xtend your customer need - Fastrack Xtend GSM/GPRS: FXT001 - Fastrack Xtend EDGE: FXT002, FXT009 - Fastrack Xtend 3G: FXT003 - Fastrack Xtend CDMA: FXT004 - Default features/configuration included in all Fastrack Xtend (Except FXT004) - OpenAT support included - TCP/IP Plug-In and Internet Plug-in included - UART speed: 115200 bauds - European Band enabled - C-GPS commercial feature enabled - Security commercial feature enabled - IMEI included - Identify if optional features are requested by your customer - End customer requires US Band enabled by default - End customer requires specific firmware version

Last SKU

Reference	Last SKU	Firmware version	
Fastrack Xtend GSM/GPRS	FXT001_0CN19H046	R7.43	
Fastrack Xtend EDGE	FXT002_0CN19G046	R7.43	
Fastrack Xtend EDGE	FXT009_0CN19G046	R7.43	
Fastrack Xtend 3G	FXT003_0CY19L046	R7.43Ex	
Including accessories kit			
Description	The last 3 digits define:		
FXT00x_xxxxxx 046	Fastrack Xtend standard (include: FXT + USB cable + 6 wires power cable + Holding bridges)		
FXT00x_xxxxxx 043	Fastrack Xtend standard + Battery Pack		
FXT00x_xxxxxx 047	Fastrack Xtend standard + GSM Antenna + Power Supply + Data Cable		
FXT00x_xxxxxx 048	Fastrack Xtend standard + GSM Antenna + Power Supply + Data Cable + Battery Pack		
Main accessories	Last SKU		
Ethernet	FXTE02_00003B		
GPS + IO	FXTE01_000000		
Battery Pack	FXTB		

Commercial features

Description	Available commercial features within latest SKU.	
IMEI	✓ Offered	Fastrack comes natively with an IMEI number preloaded
TCP/IP	✓ Offered	Provide standard access to TCP, UDP socket handling by AT Commands and OpenAT
Internet Plug-In	✓ Offered	Provide access to HTTP, FTP, SMTP, POP3, and DHCP by OpenAT
C-GPS	✓ Offered	Provide support of the eRide GPS library included

Security	✓ Offered	Provide support of SSL library and Jamming detection by OpenAT
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Main Characteristics					
	FXT001	FXT002	FXT009	FXT003	FXT004
Module	AirPrime Q2686G	AirPrime Q2687G	AirPrime Q2687RD	AirPrime Q26Extreme	AirPrime Q26Elite
Services	GSM/GPRS Class 10	GSM/GPRS/EDGE		GSM/GPRS/EDGE /WCDMA	CDMA 1xRTT
Bands	Quad Band 850/900/1800/1900	Quad Band 850/900/1800/1900		2G Quad Band 850/900/1800/1900 3G Tri Band 850/1900/2100	800/1900
Diversity	N/A	N/A		Yes	No
GPS	Via Expansion Card GPS	Via Expansion Card GPS		Via Expansion Card GPS	GPS One
OpenAT	Yes	Yes		Yes	No
Expansion Card support	Yes	Yes		Yes	No
Memory sizes (MB = Mega Bytes)	Flash: 8MB RAM: 2MB	Flash: 8MB RAM: 2MB		Flash: 8MB RAM: 2MB	
Overall Dimensions	Length: 89mm ; Width: 60mm ; Thickness: 30mm				
Weight	97g	97g		120g	
Temperature range	-30°C to +75°C				
Environmental	Compliant with RoHS/WEEE Directive 2002/95/EC				
Web link	Here	Here		Here	Here
Download area	Here	Here		Here	Here

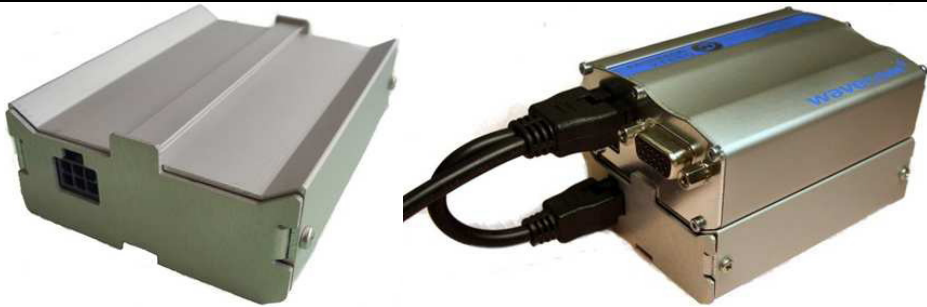
Interfaces	
Description	Native interfaces available on Fastrack Xtend
Native Connectors	
USB	USB 2.0 Slave
15 pin Sub-D	RS232 interface + Audio MIC & SPEAK + Boot pin + Reset pin
10 pin Micro-Fit	Power Supply + ON/OFF + 2 GPIO + Vref
SIM	3V/1V8 SIM interface
Antenna	Main RF: SMA Diversity RF on FXT003: SMA

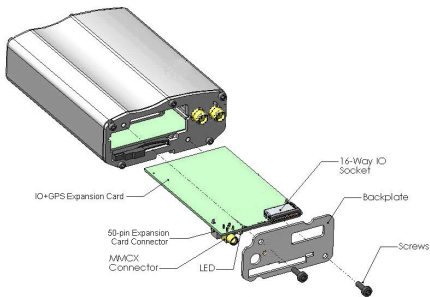
Documentations	
Description	Available documentations for Fastrack Xtend
Fastrack Xtend	Revision
Fastrack Xtend User Guide	Rev 001
Fastrack Xtend Specification	Preliminary
Fastrack Xtend vs. Fastrack Supreme	-
Fastrack Xtend & GL series datasheet	-
Expansion Card & accessories	Revision
Expansion Cards	Details in Fastrack Xtend User Guide
Expansion Cards Height limit	-
Fastrack Xtend Battery Accessory Product Technical Specifications	Rev 001 – Preliminary
Related Software	Revision
AT Commands Guide	V7.4a - Rev 013

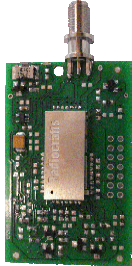
Certifications				
Description	Available certifications for Fastrack Xtend			
	FXT001	FXT002	FXT009	FXT003
GCF-CC (EU)	OK	OK	July 2010	OK
PTCRB (US)	OK	OK	July 2010	OK
Declaration of Air Compliance	OK	OK		
EMC	OK	OK		OK
IMEI Documentation	OK	OK		
PICS-PIXIT	OK	OK		
Safety Declaration	OK	OK		
AT&T	No	No	August 2010	No

Accessories	
Description	Available accessories for Fastrack

	- Standard: Included with all Fastrack - Optional: To be ordered within accessories kit or development kit - Third Parties: Available from other partners, distributors ...
Standard	
6 Wires Power Supply cable	Micro-Fit connector with colored DC-IN, GND, Vref, GPIO25, GPIO21 and ON/OFF
Holding bridges	Allow to mount the Fastrack Xtend on a support
USB Cable	To connect USB interface to its host
Optional	
2 Wires Power Supply cable	Micro-Fit connector with colored DC-IN and GND
Data cable	Provide an RS232 serial link on a Sub-D 9 connector
Data + Voice cable	Provide an RS232 serial link on a Sub-D 9 connector and Audio MIC & SPEAK on RJ11 connector
AC/DC power supply	Power adaptor: In 100V-240V (US, EU and Asia), Out 12V/2A, mounted with Micro-Fit connector
Battery Accessory	NiMH with Built-in slow charger
GSM Antenna	Quad Band antenna, GC-RUB09A from Giga Concept
GPS Antenna	GC-GAACZ-A55 from Giga Concept
Expansion Cards	See Expansion Cards section below...
Third Parties	

Battery Pack	
Description	Optional Battery Pack
SKU	FXTB
Presentation	
Specifications	Type: NiMH Capacity: 500mA/H Input Voltage: 7.5V / 32V Nominal Voltage: 3.6V Life expectancy: At least 1 year
Interfaces	6 pin Micro-Fit
Battery Cable	The Fastrack Xtend Battery comes with its Battery cable
Charging time	USB: Complete charge ≈14Hours DC-IN: Complete charge ≈16Hours
Overall dimensions	Length: 89mm Width: 60mm Thickness: 30mm Weight: 115g
Compatibility	FXT001, FXT002, FXT003
Certifications	CE marking

Expansion Cards (IESM)	
Description	An expansion cards is a little electronic boards that can be slide into a Fastrack Xtend to add new feature to its native input/output. IESM is the legacy name of Expansion Cards, and have not to be used anymore. - Sierra Wireless Expansion Cards - Third Parties Expansion Cards 
Specifications	50 pin connector Board dimension: 35.7mm x 58mm
Back Plate	This is the small metal plate which is used to seal the Fastrack. The back plate is hold by 2 little screws. Each Expansion boards have its own back plate corresponding to available interfaces.

How to use an Expansion Card with Fastrack?		An Expansion Card needs an OpenAT application specifically developed for it. This application has to be written in Standard C language through the Sierra Wireless Developer Suite.
Web link		Here
Sierra Wireless Expansion Cards		
IO + GPS 	SKU	FXTE01_000000
	GPS	eRide Opus 1 GPS GPS Antenna connector: MMCX
	GPIO	16 way IO Expander socket 6 GPIO available as Input or Output
	Back plate	Included
	OpenAT Application	Sample code in C & GPS library provided with Developer Studio
	Compatibility	FXT001, FXT002, FXT003
	16 ways IO Plug-in connector	AVX 20-9257-016-001-01-3
Ethernet 	SKU	FXTE02_00003B
	Ethernet	IEEE 802.3 compatible Integrated MAC and PHY 10 Base-T Shielded RJ45 connector
	Back plate	Included
	Ethernet RJ45 adaptor	Included
	OpenAT Application	Sample code provided in C with Developer Studio
Third Parties Expansion Cards		
	Description	Radiocrafts has launched a family of Expansion boards with Wireless M-Bus and ZigBee modules for Fastrack Supreme. The board fits directly into a slot in the modem and via free-of-charge software in the modem; wireless data collection and monitoring can be done via GSM, GPRS or EDGE. The Expansion board is dedicating proof-of-concept and pilot deployments while a final solution will be the Sierra Wireless modem of choice combined with a Radiocrafts module.
	Product web page	http://www.radiocrafts.com/index.php?sideID=388
	Supported protocols	Wireless M-Bus, ZigBee
	Documentation	Manual, datasheet, brochure
	OpenAT Application	Free AT-command based demo software for socket connection and module configuration
	Compatibility	FXT001, FXT002
	Contact & support	sales@radiocrafts.com ; support@radiocrafts.com http://www.radiocrafts.com/

Development Kit	
Description	The Fastrack Xtend Development Kit is a contain all necessary tool to any customer wishing to develop their own Expansion Card.
SKU	TBD
Content	1 x Fastrack Xtend EDGE 1 x Battery Pack 1 x USB key with Software Suite and documentations preloaded 1 x Expansion Card IO + GPS + 1 IO cable + 2 IO Connectors 1 x Expansion Card Ethernet + RJ45 adaptor 1 x Expansion Card development board 1 x Expansion Card extraction tool 1 x Global power supply adaptor 100V-240V (Europe, US, Asia) 1 x GSM/GPRS/EDGE quad band antenna 1 x GPS antenna 2 x 50 pins connector 1 x Data & Voice cable 1 x USB cable 2 x Holding bridges



Open AT®	
Description	OpenAT is a real time operating system which offers end customers the benefit of module CPU and its numerous I/O available by giving them the ability to develop their own application in C language on top.
SKU	N/A
How to get Developer Studio?	1- Register on Sierra Wireless web site 2- Go to Developer Studio section in AirPrime area: http://www.sierrawireless.com/productsandservices/AirPrime/Sierra_Wireless_Software_Suite/Developer_Studio.aspx 3- Click on one download link (Note: download links only appears if you are registered on the web site)
Learning Center	Course details and availability: http://www.sierrawireless.com/en/productsandservices/AirPrime/Learning_Center.aspx
Developer Discussion Forum	http://forum.sierrawireless.com/
DWLWIN	Last version: 4.1.6.13
Last Firmware version	R7.43

Last OpenAT SDK version	OASIS 2.33
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Application Notes	
Description	Application notes applicable to Fastrack Xtend, available from download area on Sierra Wireless web site.
Title	Description
CMUX Feature	Gives an overview of the CMUX feature as proposed by 3GPP TS 27.010
MMS	Introduction to MMS, then explains how to use it
PLMN Selection and reselection	Explain the Sierra Wireless implementation for PLMN selection and reselection
Using FCM flow	Explain steps to open a FCM flow in an application

RMA	
Description	How to handle a RMA procedure with your customers
1- Start Collecting the following information	- Customer name and details - Fastrack range (FXT00?) with its SKU - Get the list of FXT serial number & IMEI - Comprehensive description of the problem
2- Contact your customer service	You'll be guided on next steps.

Fastrack Xtend F.A.Q.

Last update : 2010-05-27

Firmware related questions

Q: Do I need a specific software tool to upgrade the firmware?

A: No, standard HyperTerminal tool, delivered with any Microsoft Windows, should be enough.

If the Fastrack Xtend seems blocked, it may require DWLWIN software tool.

Q: Is CMUX protocol supported on Fastrack?

A: Yes. Look at AT+CMUX command in AT Commands guide. An application note is available on this subject.

USB interface related questions

Q: Is Power over USB supported on Fastrack Xtend?

A: No, Natively Fastrack Xtend doesn't support Power over USB. But, if the Battery pack is used: YES. Alternative: GL6110 (USB version) supports Power over USB.

Q: Where can I get USB driver for Windows CE 6?

A: Get it from [Fastrack Xtend download area](#).

Mechanical related questions

Q: Is there any DIN rail adaptor available for Fastrack Xtend?

A: No, but holding bridles are given with each Fastrack Xtend.

Expansion Cards related questions

Q: Where can I find Expansion Cards design specifications?

A: Expansion Cards design specifications are available in Fastrack Xtend User Guide.

Q: Are the former IESM/expansion cards available for Fastrack Supreme compatible with Fastrack Xtend?

A: The Ethernet Expansion card is compatible. But, former GPS + I/O + USB IESM is not compatible, due to USB implementation and its incompatible back plate.

Old Fastrack product range related questions

Q: Is there any document/guidelines to help migrating from a Fastrack Supreme to a Fastrack Xtend?

A: Yes, a document describing differences is available from the FAE team.

Q: What are "**M1206B**", "**M1306B**", and "**Fastrack Extreme**"?

A: These are legacy Wavecom Fastrack products no more available. Suggest Fastrack Xtend as replacement.

Q: What is "**Fastrack GO**"?

A: This is a legacy Wavecom Fastrack product no more available. Suggest GL61x0 as replacement.