F3X23 Series	Documentation No.	Product	Version	Page
User Manual				
	Product Name:			Total:

F3X23 Series User Manual

The user manual is suitable for the following model:

Model	Product Type
F3123	GPRS ROUTER
F3223	CDMA ROUTER
F3323	EDGE ROUTER
F3423	WCDMA ROUTER
F35223	TD-SCDMA ROUTER
F36323	EVDO ROUTER



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Files Revised Record

Date	Version	Remark	Author





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Chapter 1 Brief Introduction of Product

1.1 General

F3X23 series ROUTER is a kind of cellular terminal device that provides data transfer function by public cellular network.

It adopts high-powered industrial 32-bits CPU and embedded real time operating system. It supports RS232 (or RS485/RS422) and Ethernet port that can conveniently and transparently connect one device to a cellular network, allowing you to connect to your existing serial and Ethernet devices with only basic configuration.

It has been widely used on M2M fields, such as intelligent transportation, smart grid, industrial automation, telemetry, finance, POS, water supply, environment protection, post, weather, and so on.



1.2 Features and Benefits

Design for Industrial Application

- High-powered industrial cellular module
- ♦ High-powered industrial 32bits CPU
- Support low-consumption mode, including sleep mode, scheduled online/offline mode, scheduled power-on/power-off mode(optional)
- Housing: iron, providing IP30 protection.
- Power range: DC 5~35V

Stability and Reliability

- Support hardware and software WDT
- Support auto recovery mechanism, including online detect, auto redial when offline to make router always online
- Ethernet port: 1.5KV magnetic isolation protection
- ♦ RS232/RS485/RS422 port: 15KV ESD protection
- ♦ SIM/UIM port: 15KV ESD protection

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- Power port: reverse-voltage and overvoltage protection
- Antenna port: lightning protection(optional)

Standard and Convenience

- Support standard RS232(or RS485/RS422) and Ethernet port that can connect to serial and Ethernet devices directly
- Support intellectual mode, enter into communication state automatically when powered
- Provide management software for remote management
- Support several work modes
- Convenient configuration and maintenance interface (WEB or CLI)

High-performance

- Support VPN client(PPTP,L2TP,IPSEC and GRE)(only for VPN version)
- Support multi online trigger ways, including SMS, ring and data. Support link disconnection when timeout
- Support APN/VPDN
- Support wireless video monitoring and dynamic picture transfer
- Support DHCP server and client, DDNS, firewall, NAT, DMZ host etc.
- Support multi protocols, such as TCP/IP, UDP, ICMP, SMTP, HTTP, POP3, OICQ, TELNET, FTP, SNMP, etc.

1.3 Working Principle

The principle chart of the router is as following:



1.4 Specifications

Cellular Specification

Standard and Band	Bandwidth	TX power	RX sensitivity
F3123 GPRS ROUTER			
EGSM900/GSM1800MHz,	85.6Kbps	GSM850/900:	<-107
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1400 - HADELMARKAN, DARE STRUKKANSKONTO			User Walluar
GSM850/900/1800/1900MHz(optional)		<33dBm	dBm
Compliant to GSM phase 2/2+			
GPRS class 10, class 12(optional)		GSM1800/1900:	
		<30dBm	
F3223 CDMA ROUTER			
CDMA2000 1xRTT 800MHz	153.6Kbps	<30dBm	<-104
800/1900MHz(optional)			dBm
450MHz(optional)			
F3323 EDGE ROUTER			
GSM850/900/1800/1900MHz	236.8Kbps	GSM850/900:	<-106
GPRS/EDGE Class 12		<33dBm	dBm
		GSM1800/1900:	
		<30dBm	
F3423 WCDMA&HSDPA&HSUPA ROU	ΓER		
UMTS/WCDMA/HSDPA/HSUPA	HSUPA:5.76Mbps	<24dBm	<-109
850/1900/2100MHz	(Upload speed)		dBm
850/900/1900/2100MHz(optional)			
GSM850/900/1800/1900MHz	HSDPA:7.2Mbps		
GPRS/EDGE CLASS 12	(Download speed)		
	UMTS:384Kbps (DL/UL)		
F3523 TD-SCDMA ROUTER			
TD-SCDMA/HSDPA/HSUPA	Download speed:2.8Mbps,	<24dBm	<-108
1880-1920/2010-2025MHz	upload speed:2.2Mbps		dBm
GSM850/900/1800/1900MHz			
GPRS/EDGE CLASS 12			
F3623 CDMA2000 1X EVDO ROUTER			
CDMA2000 1X EVDO Rev A	Download speed:3.1Mbps,	<23dBm	<-104
800MHz,800/1900MHz(optional)	upload speed:1.8Mbps		dBm
450MHz (optional)			
CDMA2000 1X RTT, IS-95 A/B			

Hardware System

Item	Content
CPU	Industrial 32bits CPU
FLASH	4MB(Extendable to 16MB)
SDRAM	32MB(Extendable to 64MB)

Interface Type

Item	Content
Ethernet	1 10/100 Mbps Ethernet port(RJ45), auto MDI/MDIX, 1.5KV magnetic
	isolation protection

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Serial	1 RS232(or RS485/RS422) port, 15KV ESD protection
	Data bits: 5, 6, 7, 8
	Stop bits: 1, 1.5, 2
	Parity: none, even, odd, space, mark
	Baud rate: 110~230400 bps
Indicator	"Power", "Online", "Alarm", "System", "Link/ACT"
Antenna	Standard SMA female interface, 50 ohm, lighting protection(optional)
SIM/UIM	Standard 3V/1.8V user card interface, 15KV ESD protection
Power	Standard 3-PIN power jack, reverse-voltage and overvoltage protection
Reset	Restore the router to its original factory default settings



Power Input

Item	Content
Standard Power	DC 12V/1.5A
Power Range	DC 5~35V
Consumption	<400mA (12V)

Physical Characteristics

Item	Content
Housing	Iron, providing IP30 protection
Dimensions	157x97x25 mm
Weight	440g

Environmental Limits

Item	Content
Operating	-25~+65 ℃ (-13~+149°F)
Temperature	
Extended	-30~+75 °C (-22~+167°F)
Operating	
Temperature	
Storage	-40~+85 °C (-40~+185°F)
Temperature	
Operating	95% (Non-condensing)
Humidity	



Chapter 2 Installation Introduction

2.1 General

The router must be installed correctly to make it work properly. Warning: Forbid to install the router when powered!

2.2 Encasement List

Name	Quantity	Remark
Router host	1	
Antenna	1	
Network cable	1	
Console cable	1	optional
Power adapter	1	
Manual CD	1	
Certification card	1	
Maintenance card	1	
Stator	2	optional

2.3 Installation and Cable Connection

Dimension: (unit: mm)





Installation of SIM/UIM card:

Firstly power off the router, and press the out button of the SIM/UIM card outlet with a needle object. Then the SIM/UIM card sheath will flick out at once. Put SIM/UIM card into the card sheath (Pay attention to put the side which has metal point outside), and insert card sheath back to the SIM/UIM card outlet.

Warning: Forbid to install SIM/UIM card when powered!

Installation of antenna:

Screw the SMA male pin of the antenna to the female SMA outlet of the router tightly. Warning: The antenna must be screwed tightly, or the signal quality of antenna will be influenced!

Installation of cable:

The router supports RS232 interface and 10/100M Ethernet interface. These two interfaces both adopt RJ45 outlet and distinguish by the sign on panel. The sign of the RS232 interface is "Console" and the sign of the 10/100M Ethernet interface is "ETH".

The router is equipped with a network direct cable and a console cable (optional).

Insert one end of network direct cable into RJ45 outlet with sign "ETH" of the router, and insert the other end into the Ethernet interface of user's device. The signal connection of network direct cable is as follows:

RJ45-1	RJ45-2
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8

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Insert the RJ45 end of the console cable into the RJ45 outlet with sign "console" of the router, and insert the DB9F end of the console cable into the RS232 serial interface of user's device.

Warning: The network direct cable and the console cable mustn't be inserted wrongly, or the router can't work properly.

The signal connection of the console cable is as follows:

RJ45	DB9F	
1	8	
2	6	
3	2	
4	1	
5	5	
6	3	
7	4	
8	7	

The signal definition of the DB9F serial communication interface is as follows:

Pin	RS232 signal name	The direction for Router
1	DCD	output
2	RXD	output
3	TXD	input
4	DTR	input
5	GND	
6	DSR	output
7	RTS	input
8	CTS	output

2.4 Power

The power range of the router is DC 5~35V.

Warning: When we use other power, we should make sure that the power can supply power above 6W.

We recommend user to use the standard DC 12V/1.5A power.

2.5 Indicator Lights Introduction

The router provides five indicator lights: "Power", "Online", "Alarm", "System", "Link/ACT". Xiamen Four-Faith Communication Technology Co.,Ltd. Page 12 of 38





Indicator	State	Introduction	
Light			
Power	ON	Router is powered on	
	OFF	Router is powered off	
Online	ON	Router has logged on network	
	OFF	Router hasn't logged on network	
Alarm	ON	SIM/UIM card does not work or the signal of the	
		antenna is week	
	OFF	Router has not alarm	
System	BLINK	System works properly	
	OFF	System does not work	
Link/ACT	OFF	The interface of Ethernet hasn't been connected	
	ON /	The interface of Ethernet has been connected	
	BLINK	/Communicating	

2.6 Reset Button Introduction

The router has a "Reset" button to restore it to its original factory default settings. When user press the "Reset" button for up to 15s, the router will restore to its original factory default settings and restart automatically.



Chapter 3 Configuration and Management

This chapter describes how to configure and manage the router.

3.1 Configuration Connection

Before configuration, you should connect the router with your configuration PC with the supplied network cable. Plug the cable's one end into the LAN port (ETH) of the router, and another end into your configure PC's Ethernet port. The connection diagram is as following:



Please modify the IP address of PC as the same network segment address of the router, for instance, 192.168.1.9. Modify the mask code of PC as 255.255.255.0 and set the default gateway of PC as the router's IP address (192.168.1.2).

3.2 Access the Configuration Web Page

Start a web browser and type 192.168.1.2 in the Address (URL) field (The Default IP Address of the Ethernet port is 192.168.1.2). It will prompt a login page. The default username and password are both "admin". Please input the username and password login to access the configuration pages.

Authenticat	ion Required	×
?	A username and password are being requested by $http://192.168.1.2.$ The site says: "Ffaith"	'our-
User Name:	admin	
Password:	••••	
	OK Cancel	
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3.3 Configuration

3.3.1 Welcome

The "Welcome" page will give some contact information, if you have any question or problem, please contact us.



3.3.2 WAN Settings

This page is used to configure the Internet access parameters.

WAN Wireless

WAN Wireless	
UserName	
Password	
Call Center	*99***1#
APN	••••

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UserName: username used to login your ISP(Internet Service Provider) Password: password used to login your ISP Call Center: The dial number of your ISP

APN: The access point name of your ISP

Note:

Model	APN	Username and password	Call center
F3123	Cmnet	null	*99***1#
	Uninet		
F3223	null	card	#777
F3323	cmnet	null	*99***1#
F3423	3gnet	null	*99#
F3523	cmnet	null	*98*1#
F3623	null	card	#777

Internet IP Address

Internet IP Address

Get Dynamically From ISP

O Use Static IP Address

Normally, The Internet IP Address of the router is allocated by the ISP automatically, you can also fix this address if the ISP agree.

Domain Name Server (DNS) Address

Domain Name Server (DNS) Address

- Get Automatically From ISP
- C Use These DNS Servers

Primary DNS	202 .	101 .	103 .	55
Secondary DNS	202	101 .	98 .	55

Normally, the Domain Name Server (DNS) Address of the router is allocated by the ISP automatically. You can also use your own DNS address. If you want to use your own DNS, please make sure the DNS address you configured is usable and stable.

Keep Online Detection



Keep Online Detection

Detection Method	None 💌
Detection Interval	60
Primary Detection Server IP	166 111 8 238
Backup Detection Server IP	202 119 32 102

This function is used to detect whether the Internet connection is active, if you set it and when the router detect the connection is inactive ,it will redial to you ISP immediately to make the connection active.

Detection Method:

None: do not set this function

- Ping: Send ping packet to detect the connection, when choose this method, you should also configure "Detection Interval", "Primary Detection Server IP" and "Backup Detection Server IP" items.
- Route: Detect connection with route method, when choose this method, you should also configure "Detection Interval", "Primary Detection Server IP" and "Backup Detection Server IP" items.
- PPP: Detect connection with PPP method, when choose this method, you should also configure "Detection Interval" item.

Detection Interval: The time interval between two detections, unit is second

Primary Detection Server IP: The server used to response the router's detection packet. This item is only valid for method "Ping" and "Route".

Backup Detection Server IP: The server used to response the router's detection packet. This item is valid for method "Ping" and "Route".

Note: When you choose the "Route" or "Ping" method, it's quite important to make sure that the "Primary Detection Server IP" and "Backup Detection Server IP" are usable and stable, because they have to response the detection packet frequently.

3.3.3 LAN Settings

LAN TCP/IP Setup	
IP Address	192 168 1 2
IP Subnet Mask	255 255 255 0
MAC Address	00 : 00 : 00 : 00 : 22

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IP Address: the LAN port IP Address.

Note: If you change the LAN IP Address, you have to reboot the router to make it valid.

IP Subnet Mask: the LAN port subnet mask.

MAC Address: the LAN port Ethernet MAC Address

Use Router as DHCP Server

Starting IP Address	192 . 168	. 1	. 11
Ending IP Address	192 . 168	. 1	. 254

Use Router as DHCP Server: Enable or disable the router work as a DHCP server.

Starting IP Address: The starting IP Address of the DHCP server's Address pool Ending IP Address: The ending IP Address of the DHCP server's Address pool

3.3.4 NAT

The router causes your entire local network to appear as a single machine to the Internet, You can make a local server visible and available to the Internet, This is done using the NAT (Network Address Translation). The NAT configuration page is as following:

Add a NAT item



Service Name: This NAT item's name

Service Type: The protocol type of the target packet

Outside Starting Port: The target packet's destination port

Inside Start Port: The destination port of packet which has been processed by the NAT module.

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Port Numbers: Port numbers which will be processed by the router. Server IP Address: Local server IP Address.

Example:

Configure an item as following

Add NAT Items

Service Name	my_nat1
Service Type	TCP 💌
Outside Starting Port	5001 (1~65534)
Inside Start Port	5001 (1~65534)
Port Numbers	3
Server IP Address	192 168 1 249
	Add Item

Once adding it, The custom NAT items table will displays this item

Custom NAT Items

	Choose	#	Service Name	Outside Start Port	Inside Start Port	Port Numbers	Server IP Address	Protocol
	0	1	my_nat1	5001	5001	3	192.168.1.249	TCP
Delete Item			m					

This item will make the router process packet with the destination port from $5001 \sim 5003$ (total 3 port numbers), after processed by the NAT module, the destination port will be $5001 \sim 5003$ correspondingly and the packet will be sent to host 192.168.1.249.

Delete a NAT item

To delete a NAT item, you should choose this item and press "Delete Item" button.

3.3.5 DMZ

Incoming traffic from the Internet is normally discarded by the router unless the traffic is a response to one of your local computers or a service that you have configured in the NAT page. Instead of discarding traffic for services you have not defined, you can have it forwarded to one computer on your network. This computer is called the Default DMZ Server.



Enable DMZ	C Enable 💿 Disable
DMZ IP	192 168 1 9

Enable DMZ: Enable or disable DMZ function. DMZ IP: DMZ server IP Address.

3.3.6 Filter

To block some packets getting Internet access or block some Internet packets getting local network access, you can configure filter items to block these packets.

Packet Filter

Packet filter function is realized based on IP address or port of packets.

Enable Packet Filter	C Enable 💿 Disable	
Policy	Discard The Following 📃 💌	
	Apply	

Enable Packet Filter: Enable or disable "packet filter" function

Policy: The filter rule's policy, you can choose the following options

- Discard The Following--Discard all packets matched the custom filter rules, Accept all other packets
- Only Accept The Following--Accept all packets matched the custom filter rules, Discard all other packets

Add Filter Item

Add Filter Item Direction Protocol TCP Source Port Destination Port Destination IP Add Item

Direction

input: packet from WAN to LAN

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output: packet from LAN to WAN

Protocol: packet protocol type

Source Port: packet's source port

Destination Port: packet's destination port

Source IP: packet's source IP address

Destination IP: packet's destination IP address

Note:

"Source Port", "Destination Port", "Source IP", "Destination IP" could not be all empty, you have to input at least one of these four parameters.

Example:

If want to block local network PC 192.168.1.249 telnet(TCP port 23) to any other Internet Address ,the filter item could be configured as following:

Add Filter Item

Direction	output 💌
Protocol	ТСР
Source Port	(1~65534)
Destination Port	23 (1~65534)
Source IP	192 168 1 249
Destination IP	
	Add Item

The following is the configured filter item:

Choose #	Source IP	Source Port	Destination IP	Destination Port	Direction	Protocol
0 1	192.168.1.249	*	*	23	output	ТСР
Delete Item						

MAC Restrict

This filter function is based on the Ethernet MAC address.



Enable MAC Restrict	C Enable 💿 Disable
Policy	Discard The Following 📃 💌
	Apply

Enable MAC Restrict: Enable or disable MAC Restrict function

Policy:

Discard The Following -- Discard all packets matched the custom MAC Restrict rules, Accept all other packets

Only Accept The Following -- Accept all packets matched the custom MAC Restrict rules, Discard all other packets

MAC Address		:	:
	Add Item		

MAC Address: The MAC Address applied to this MAC Restrict item.

3.3.7 Static Routes

Static Routes provide additional routing information to your router. Under normal circumstances, the router has adequate routing information after it has been configured for Internet access, and you do not need to configure additional static routes. You must configure static routes only for unusual cases such as configured VPN tunnel or multiple IP subnets located on your local network.

Static Routes

#	Name	Destination	Mask	Gateway
		Add Delete		

Press "Add" button to start add a custom static route:

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Static Routes

Route Name Destination IP Address IP Subnet Mask Gateway IP Address Metric	
	Apply Cancel

Route Name: This static route's name, It is for identification purpose only

Destination IP Address: The packet's destination IP Address

IP Subnet Mask: The subnet mask for this destination, If the destination is a single host, please input 255.255.255.255.255

Gateway IP Address: The gateway IP Address of this packet.

Metric: A number between 1 and 15, It represents the number of routers between your network and the destination. Usually, a setting of 2 or 3 works

If you want to delete one custom static route, choose this item and press "Delete" button.

3.3.8 Router Status

This page displays the router's status information.

System Account Name Firmware Version Module Type

admin V-1.0:2008-10-31 12:12:00 SIEMENS MODULE

Account Name: The username to login the router. Firmware Version: Software version information Module Type: The wireless module used to get the Internet access



Intor	not	Dort
litteri	net	PULL

Status	online
IP Address	10.95.208.253
Gateway	10.64.64.64
Domain Name Server	211.138.151.161
	211.136.18.171

Status: the current Internet access status

At State --- System is initialize the module Dialing --- System is dialing to ISP Online --- System has got Internet access

IP Address: The local Internet IP Address

Gateway: The ISP gateway IP Address

Domain Name Server: The Domain Name Server (DNS) IP Address.

LAN Port

IP Address	192.168.1.2
DHCP	Enable
IP Subnet Mask	255.255.255.0

IP Address: the LAN port IP Address DHCP: the DHCP server status IP Subnet Mask: The LAN port subnet mask

PPTP Client

Status	Disable
Interface	
Local Tunnel IP	
Remote Tunnel IP	

Status: current PPTP client status. Interface: The interface name of the PPTP tunnel when the tunnel is up. Local Tunnel IP: The local tunnel IP Address when the tunnel is up. Remote Tunnel IP: the PPTP server's tunnel IP Address when the tunnel is up.

L2TP Client

Status Interface Local Tunnel IP Remote Tunnel IP

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Disable

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Status: current L2TP client status.

Interface: The interface name of the L2TP tunnel when the tunnel is up.

Local Tunnel IP: The local tunnel IP Address when the tunnel is up.

Remote Tunnel IP: the L2TP server's (LNS) tunnel IP Address when the tunnel is up.

3.3.9 Backup Settings

This function can save the router's current configuration to a file. You can restore the configuration with the file later.

Note:

Please do not edit the saved file. If the file used to restore configuration is not correct, the router will restore to factory default setting.

Backup Settings

Save A Copy Of Current Settings		
		Backup
Restore Saved Settings From A I	File	
	Browse	
		Restore

To save your configuration, click the "Backup" button, your browser will extract the configuration file from the router and will prompt you for a location on your computer to store the file. The default file name is "router-config.txt". You can also give the file a more meaningful name.

To restore your configuration from a saved file, enter the full path to the file on your computer or click the "Browse" button to browse to the file. When you have located it, click the "Restore" button to send the file to the router to restore configuration.

3.3.10 Load Default



It is sometimes desirable to restore the router to the factory default settings. This can be done by using the "Load Default" function, which will restore all factory settings.

To load default settings, please click the "Load Default" button. A prompt page will give you a choice to give up this operation or continue. Click "YES" button to load default and "No" to give up.

Load Default	
Loading the Factory	Default Settings will erase all the current settings.
Are you sure you wa	nt to do this?
	Yes No

3.3.11 Set Password

The default username and password are both "admin".

To change the username and password, type the new username, old password and new password.

Set Password	
User Name	admin
Old Password	
New Password	
Repeat New Password	

3.3.12 Logs



This function is used to debug the software, when there is some problem with the router, you can get the log information and send it to us to diagnose the problem. Normally this function should be disabled.

Logs

Enable Log Log Way	C Enable	192 . 168 . 1 . 9
4		×
	Refresh Clear Log Save	: Log

Enable Log: Enable or disable this function Log Way: there are three log ways

Web:

Enable Log	⊙ Enable ○ Disable	
Log Way	⊙ Web C Console C Syslog	192 168 1 9
	Apply	

The log message is displayed on this web page. You can save the log message to a file by click "Save Log" button.



30-	;	>													
80	21	01	04	00	1c	03	06	00	00	00	00	02	06	00	
0f	01	81	06	00	00	00	00	83	06	00	00	00	00		
30-	>	≻													
80	21	01	04	00	1c	03	06	00	00	00	00	02	06	00	
0f	01	81	06	00	00	00	00	83	06	00	00	00	00		
30-	>	>													
80	21	01	04	00	1c	03	06	00	00	00	00	02	06	00	
0f	01	81	06	00	00	00	00	83	06	00	00	00	00		
30-	>	≻													
80	21	01	04	00	1c	03	06	00	00	00	00	02	06	00	
0f	01	81	06	00	00	00	00	83	06	00	00	00	00		
30-	>	≻													
80	21	01	04	00	1c	03	06	00	00	00	00	02	06	00	
0f	01	81	06	00	00	00	00	83	06	00	00	00	00		◄
			R	ofree	h I	CL	earl	nn		Saw	e L o	a			
						~	o an i	-09		- u u u	- LO	9 1			

Console:

Enable Log	\odot Enable \odot Disable	
Log Way	O Web ⊙ Console O Syslog	192 168 1 9
	Apply	

The log message is output to the console port.

To use this way, you should connect the router's console port and your PC's serial port with the supplied console cable. Then open hyper terminal with the following serial port settings:

Baud :115200 bpsDatabit:8Parity :NoneStopbit:1Flow control:None

When you configure the serial port settings, press "call" button, The router log message will be displayed.





🏀 ff - HyperTerminal	
<u>F</u> ile <u>E</u> dit <u>V</u> iew <u>Call</u> <u>Transfer</u> <u>H</u> elp	
ff 03 80 21 04 09 00 0a 02 06 00 2d 0f 01 ! 24>	
80 21 01 0a 00 16 03 06 00 00 00 81 06 0a 0b 0c 0d 83 06 0a 0b 0c 0a 0b <8	
ff 03 80 21 01 03 00 04 !	
80 21 02 03 00 04 .!	
ff 03 80 21 03 0a 00 16 03 06 0a 5f b2 51 81 06	
80 21 01 0b 00 16 03 06 0a 5f b2 51 81 06 d3 8a .!	
ff 03 80 21 02 0b 00 16 03 06 0a 5f b2 51 81 06	
set remote 10.64.64.64	
Connected 0:57:44 Auto detect (115200 8-H-1) SCROLL CAPS NUM Capture Print echo	

You can capture the log message into a file:

From the menu, choose "Transfer" \rightarrow "capture text"

Capture	Text	? ×
Folder:	C:\my-hypertrm\HyperTerminal	
<u>F</u> ile:	d:\ff-router-log.txt	<u>B</u> rowse
	Start	Cancel

Input the log file name and press "start" button, the output message are now stored in the log file.

When enough message captured, you can stop capturing:

From the menu, choose "Transfer" \rightarrow "capture text" \rightarrow "stop"

Syslog:

Enable Log	⊙ Enable ○ Disable	
Log Way	O Web O Console ⊙ Syslog	192 . 168 . 0 . 9
	Apply	

The log message is output to a syslog server, if choose this way, you should input a syslog server's IP Address and run a syslog server program on it.



3.3.13 Misc

Normally, the four-faith web config tool listens on port 80. If you want to change listening port, please configure "web config port" item.

Web Config Port

80	
Apply	,

To reboot the router, press the "Reboot" button.

Reboot System



3.3.14 PPTP Client

PPTP Client

PPTP Server IP	222.33.9.43
Local Tunnel IP	Auto C Fixed IP
User Name	test
Password	
	Apply Cancel

Enable PPTP Client: Enable or disable PPTP Client function

PPTP Server IP: The PPTP server's IP Address

Local Tunnel IP: The local tunnel IP Address, if you choose "Auto", the Address is allocated by the PPTP Server dynamically. You can also use the fixed local tunnel IP if the PPTP Server support

User Name: Username to login the PPTP Server.

Password: Password to log into the PPTP Server.

3.3.15 L2TP Client

Four-Faith		User Manual
L2TP Client		
Enable L2TP Client L2TP Server IP (LNS) Local Tunnel IP	222 . 33 . 9 . 43	
User Name Password		
	Apply Cancel	

Enable L2TP Client: Enable or disable L2TP Client function

L2TP Server IP (LNS): The L2TP server's IP Address

Local Tunnel IP: The local tunnel IP Address, if you choose "Auto", the Address is allocated by the L2TP Server dynamically. You can also use the fixed local tunnel IP if the L2TP Server support

User Name: Username to login the L2TP Server.

Password: Password to login the L2TP Server.



3.3.16 IPSEC Client

Enable IPSEC Client	
IPSEC Tunnel Name	ff_tun_1 Interface: PPP 💌
Peer WAN Address	
Peer ID	
Peer Subnet	192.168.47.0/24 (eg: 192.168.47.0/24)
Local ID	
Local Subnet	192.168.1.0/24 (eg:192.168.1.0/24)
Authentication Method	PSK 🗸
Pre-Shared Key	
Confirm Pre-Shared Key	
Perfect Forward Secrecy(PFS)	O Enable 💿 Disable
IKE Algorithm	IKE IKE IKE DH Encryption Auto V Integrity Auto V Group Auto V
IPSEC 算法	IPSEC Encryption IPSEC Integrity IPSEC DH Group Auto Auto Auto
IKE Lifetime	3600 (Seconds)
IPSEC Lifetime	28800 (Seconds)
Debug Mode	🔘 Enable 💿 Disable
NAT-Traversal	🔘 Enable 💿 Disable
NAT Keepalive Interval	60 (Seconds)
Dead Peer Detection(DPD) Interval	60 (Seconds)
Dead Peer Detection(DPD) Timeout	60 (Seconds)
Connection detect enable	🔘 Enable 💿 Disable
Connection Detect Host	
Connection Detect Interval	(Seconds)

3.3.17 Dynamic DNS

If your network has a permanently assigned IP address, you can register a domain name and have that name linked with your IP address by public Domain Name Servers (DNS). However, if your Internet account uses a dynamically assigned IP address, you will not know in advance what your IP address will be, and the address can change frequently. In this case, you can use a commercial dynamic DNS service, which will allow you to register your domain to their IP address, and will forward traffic directed at your domain to your frequently-changing IP address.

The four-faith router currently support 88ip(<u>www.88ip.net</u>) and 3322(<u>www.3322.org</u>) Dynamic DNS provider.

88ip:



Dynamic DNS

Enable Dynamic DNS Service						
Service Provider	www.88ip.net					
Host Name	user.dipns.com					
Backup Host Name	link.dipserver.com					
User Name	tomjerry555					
Password						
Update Interval	60					
	Apply Cancel Show Status					

Enable Dynamic DNS Service: Enable DDNS service Service Provider: the DDNS service provider Host Name: The 88ip provider's server hostname Backup Host Name: The 88ip provider's backup server hostname User Name: Your 88ip account username Password: Your 88ip account password

Update Interval: The time interval of IP Address update, unit is second

3322:

Dynamic DNS

Enable Dynamic DNS \$	Service
Service Provider	www.3322.org
Host Name	members. 3322. org
Customer Domain	tomjerry555.3322.org
User Name	tomjerry555
Password	
Update Interval	60
	Apply Cancel Show Status

Enable Dynamic DNS Service: Enable DDNS service

Service Provider: the DDNS service provider

Host Name: The 3322 provider's server hostname

Customer Domain: Your custom 3322 domain name.

User Name: Your 3322 account username

Password: Your 3322 account password

Update Interval: The time interval of IP Address update.

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The "Show Status" button is used to display the current DDNS status.



The above DDNS status page shows the domain name tomjerry555.3322.org now point to IP Address 10.95.207.236

3.3.18 Serial Settings

There is a console port on Four-Faith router. Normally, this port is used to debug the router. This port can also be used as a serial port. The router has embedded a serial to TCP program. The data sent to the serial port is encapsulated by TCP/IP protocol stack and then is sent to the destination server. This function can work as a Four-Faith DTU (Data Terminal Unit). Please refer <u>www.four-faith.com</u> for more information about this product.

Serial S	ettings
----------	---------

Baudrate:	115200 💌
Databit:	8 💌
Parity:	None 💌
Stopbit:	1 💌
Flow Control:	None
Enable Serial TCP Function	
Protocol Type:	Pure TCP
Server Address	166.111.8.238
Server Port	23
Device ID	13312345678
Heartbeat Interval	60
	Apply Cancel

Baudrate: The serial port's baudrate

Databit: The serial port's databit

Parity: The serial port's parity

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Stopbit: The serial port's stopbit

Flow Control: The serial port's flow control type.

Enable Serial TCP Function: Enable the serial to TCP function

Protocol Type: The protocol type to transmit data.

UDP(DTU) – Data transmit with UDP protocol, work as a Four-Faith DTU which has application protocol and hear beat mechanism.

Pure UDP – Data transmit with standard UDP protocol.

TCP(DTU) -- Data transmit with TCP protocol, work as a Four-Faith DTU which has application protocol and hear beat mechanism.

Pure TCP -- Data transmit with standard TCP protocol.

Server Address: The data service center's IP Address or domain name.

Server Port: The data service center's listening port.

Device ID: The router's identity number.

Heartbeat Interval: The time interval to send heart beat packet. This item is valid only when you choose UDP(DTU) or TCP(DTU) protocol type.



Chapter 4 Appendix

The following steps describe how to setup Windows XP Hyper Terminal.

1. Press "Start"→ "Programs" → "Accessories" → "Communications" → "Hyper Terminal"

Connection Description	? 🗙
New Connection	
Enter a name and choose an icon for the connection:	
Name:	
ff	
🍋 🍣 🧇 🗠 😺	8
	>
OK Car	ncel

- 2. Input connection name, choose "OK"
- 3. Choose the correct COM port which connects to modem, choose "OK"

Connect To	? 🔀
🧞 ff	
Enter details for	the phone number that you want to dial:
Country/region:	United States (1)
Area code:	123
Phone number:	
Connect using:	СОМ1
	OK Cancel

4. Configure the serial port parameters as following, choose "OK"

Bits per second: 115200

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Data bits: 8 Parity: None Stop bits: 1 Flow control: None

COM1 Properties		?×
Port Settings		
Bits per second:	115200	
Data bits:	8	
Parity:	None 🗸	
Stop bits:	1 🗸	
Flow control:	None 🗸	
	Restore Defa	ults
01	K Cancel	Apply

5. Complete Hyper Terminal operation, It runs as following

🌯 ff - HyperTerminal								X
File Edit View Call Transfer Help								
🏽 🖆 🖉 🖉 👘								
Connected 0:00:06 Auto detect	Auto detect	SCROLL	CAPS	NUM	Capture	Print echo		

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