



## Tiger IPCL 4.6.01 Features & Functionalities

Features	TigerTMS IPCL	Description
<b>General</b>		
Operating system	*	Linux
GUI	*	Windows format
Room types	Unlimited	The Hotel property can be divided into an unlimited number of room types (standard; Executive; meeting; ...) Each room type can have its own cost/sell pricing table.
Scalability (OPTIONAL)	*	Network distributed modules and interfaces
Guest network	*	Manages a mix of wired and wireless networks
URL filtering	*	
Pass-through address	*	
Database import	*	
Database export	*	
Multi-Language support for management GUI	*	Currently supported languages are: English; Dutch; French & German
GUI tool for creation of new languages for management screens	*	Full editing tool for translating management GUI into any language.
Web based clients	*	Web based Management access
SSL support	*	SSL Support for portal and management interface (only on Linux)
Multiple time zones	*	IPCL supports multiple time zones
Multi-subscriber interfaces (OPTIONAL)	*	Multiple interfaces possible for serving different guest networks. Interface possible to any internet gateway with RADIUS client capabilities. Tested configuration with Nomadix; Antlabs; Colubris and Xirrus WiFi Arrays (Properties using Xirrus equipment for their Wi-Fi coverage can now use the Array Manager for the user management. The Array Manager synchronizes the user databases of all Xirrus Arrays in your network) Wizard included to add subscriber network
Site management (OPTIONAL)		Where IPCL only allows for a single site management (with different locations), IP Connect Central allows for multi-site management. IP Connect Central allows also for a tree-based hierarchical structure, so certain sites can be managed individually, sharing the same central application and database
VLAN / Room	*	VLAN to room assignment is done in IP Connect, rather than in the internet gateway
NTP support	*	



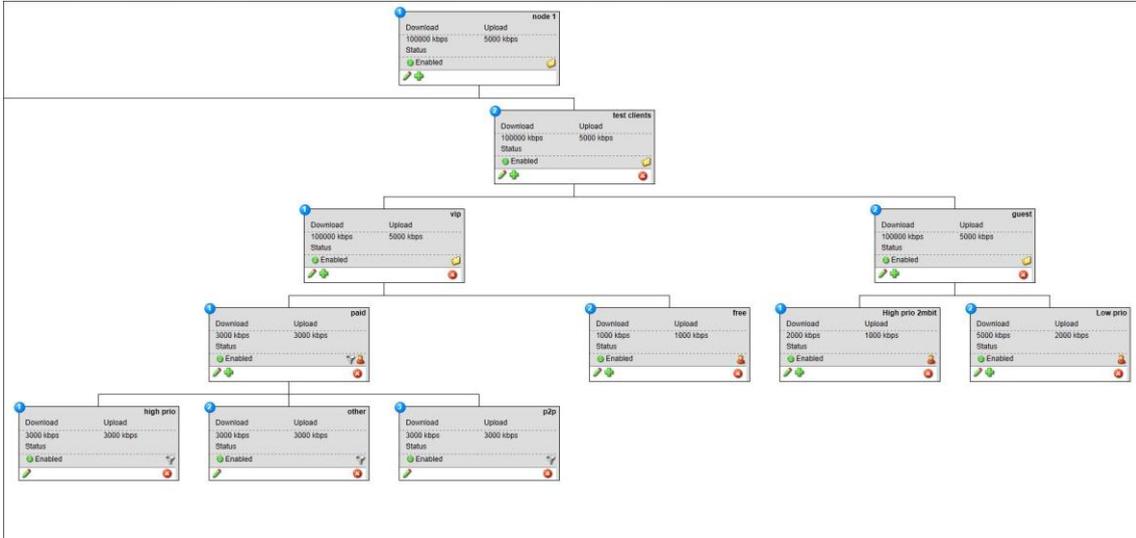
Features	TigerTMS IPCL	Description
Subscriber upgrade functions without losing the current internet session. (Only available using TigerTMS IPCL Gateway or IPCX gateway with 3 <sup>rd</sup> Party HSIA solutions)	*	Subscribers have the ability to upgrade to another billing or access plan, without having to lose the current internet connection. Upgrade is completed either through an option shown on the logout console or through calling an upgrade portal - by typing UPGRADE in the address bar.
AAA per Location	*	Charge/open/close access control - per defined location
Port Forwarding	*	Forwarding of any inbound traffic to predefined host addresses, located on the subscriber network(s)
Connection tracking	*	Multiple VPN tunnels out of the same subscriber network are possible and must be towards the same VPN host. List of VPN protocols can be adjusted for each VPN tunnel connection. Public address pool is configurable on a per connection setup.
Static DHCP support	*	Predefined MAC addresses can be allocated to predefined IP addresses out of the DHCP pool.
IPCL Summary	*	Summary of all settings.
OSI Layer 2 & 3 support	*	IPCL supports traffic handling and control on layer 2 (MAC; IP; VLAN tags;...) as on Layer 3 (IP addresses).
Special DHCP option	*	Example: DHCP support for VIOP phones; Time servers;...
Realm based routing	*	Possibility to log in users from multiple external RADIUS servers: supports authentication from extra and multiple user databases. Example: Allows RADIUS authentication for multiple IP providers.
MAC based authentication (against external RADIUS)	*	Supports MAC authentication on multiple RADIUS servers
SMS Integration	*	SMS as a authentication mechanism, the system support SMS services based on SMTP2SMS
Supports User Management System (UMS)	*	Free Windows based application which is designed to easily create and print vouchers without opening the IPCL interface. With a valid username and password, vouchers can be created by the staff without formal IPCL training.. The UMS also gives you the ability to print to any network printer that is installed on the UMS PC.
Supports LDAP Management user authentication (OPTIONAL)	*	Can be linked to any LDAP accessible directory database in order to use external stored user management credentials
IP Version 6 prepared	*	Prepared to support IP version 6 addressing
Customizable Admin Login screen	*	Ability to add/change/delete text; logos; username & password button screen positions
Administration GUI complete html5	*	Compliant with Apple (IOS) devices or devices without flash.



Features	TigerTMS IPCL	Description
Detects device type connected		(e.g. Smart phones types, ....) Statistics about devices connected Portal rules / upgrade rules can use devices as trigger
Performance improving	*	Local caching of web pages, faster web page delivery
Password policies for administrators	*	Password expiry / blocking, ...
<b>Traffic shaping (Quality-of-service) (OPTIONAL)</b>		
Allows for traffic prioritization	*	Based on drag-and-drop tree based structure., Ability to setup traffic prioritization and therefore allow traffic to prioritized for higher profile users
Allows for Bandwidth allocation and bandwidth restriction	*	In each Traffic Shaping rule, bandwidth settings for UP and DOWN traffic are configurable
Cross subscriber network	*	Traffic Shaping rules are applied to any available subscriber network
Multi Traffic Shaping rule levels	*	Traffic Shaping rules can be automatically allocated per group; location; multiple number of users/guests or individual users/guest
Traffic Shaping rule linked to User/Guest profiles	*	Through the billing plans and IPCL rules, there is the ability to link specific Traffic Shaping rules to specific user/guest profiles, sent by the PMS
OSI Layer 7 Traffic Shaping rules	*	Allows to specify, which internet Application (OSI Layer 7: HTTP; SMTP; FTP; bittorrent;...) is allowed/prioritized/blocked
OSI Layer 2 Traffic Shaping rules	*	Allows to specify, port (OSI Layer 2: UDP; TCP;...) is allowed/prioritized/blocked
User/Guest usage indication	*	Indicates how many users/Guest are currently using this Traffic Shape rule
Cross WAN usage	*	Traffic Shaper can make use of all available WAN interfaces (WAN primary and additional WAN connections through Load Balancing)



Example of a traffic Shape tree:



Example of a traffic Shape Layer 7 rules:

Details

**Details**

Name:

Priority:

Enable:

**Bandwidth**

Download:  kbps  
( 100000 kbps Available )

Upload:  kbps  
( 5000 kbps Available )

**Type**

User profile      User profile are used for individual users.

**Network policies** +

Action	Limit	Redirect	Protocol	Destination IP	QoS profile	Action
ACCEPT			bittorrent		p2p	
ACCEPT			http		high prio	
ACCEPT			ANY		other	



Features	TigerTMS IPCL	Description
<b>Subscribers</b>		
Subscriber search	*	Subscribers search with wildcards
Sort active users	*	Active users can be sorted by username/room/type
Subscriber Welcome email	*	Welcome email for new subscribers
Username & Password forgotten?	*	Subscribers can receive via email, current Username and Password, in case it has been forgotten
Subscriber reactivation	*	Allows for reactivating an expired subscriber with possibilities to setup password (higher management level); volume; expire time; session time; volume
Subscriber Law full interception EU-Data Retention (2006/24/EG)	*	Subscriber session data available with search options on: destination IP; destination port; Source IP; Source port; MAC address and username
URL logging	*	Ability to activate URL logging: logging user activity which URLs have been visited, including info such as date; MAC address; username; IP address and URL page, visited. This function caches web pages for faster content delivery. This feature can be deactivated for legal reasons.
Subscribers remember login	*	If allowed from browser, Cookie based login
Active users	*	Users can be configured manually on-line for instant access.
User Group support	*	Subscribers can be added to a group and be given separate conditional internet access
Full user editor	*	All setting of a user profile can be edited per user, you can update bandwidth, time , volume per users and the user is automatically updated
<b>BILLING or ACCESS PLAN functions</b>		
Pre-paid Billing	*	Unlimited number of pre-paid billing plans are configurable
Post-paid Billing	*	Unlimited numbers of post-paid billing plans are configurable with charging options per minute/hours/days.
Band width control	*	Band width allocation (UP/DOWN) definable per billing package
Free definable session time	*	Session time can be set-up per billing plan and can be set up in free definable number of minutes; hours ;week and months
Free definable expire time	*	Expire time of billing plan can be set up in free definable number of minutes; hours ;week and months
Free definable timeout	*	Session timeout of billing plan can be set up in free definable number of minutes; hours; week and months.This prevents the user from being logged in unnecessarily



Features	TigerTMS IPCL	Description
Free definable volume	*	Traffic volume can be set-up in Gigabytes
Allocation of Billing to Private or Public IP address	*	Pre definable public IP addresses can be allocated to a specific plan
Free Billing allowance	*	Free billing allowance is configurable: the free plan can be offered once per day/week/month, per subscriber either based on MAC address or Guest ID
Simultaneous users	*	Billing plans can be made available to a limited number of users
MAC address	*	Billing plans can be made available for a limited number of MAC address without the need for a new access purchase. (MAC addresses are not on-line at the same time)
Default Billing setup	*	Billing plans can be marked as DEFAULT, appearing as first to the guest in the portal
Billing plan sorting	*	Billing plan can be display in a sorted appearance on the guests portal
Free Access plans	*	Free access plans with limited session time and volume can be defined. Mostly used as incentives
Centralized Application (OPTIONAL)		Multiple gateway site configuration without possibility for overlapping room numbering plans
Bi-directional PMS communication	*	IP Based interface with free definable fields. Interfaces directly to Micros Fidelio, Amadeus, Hilton OnQ; Protel; Briliant; Hotel Concepts via FIAS or via Tiger Hotel Cub/Pro Call management. (see also Extra functions on Bi-Di interfaces)
Access plan start date and end date	*	Allows the use of a specific access plan from a certain date onwards
Access plans for staff	*	Allows for setting access plans for staff. Allows full bandwidth; time and volume control for internal or external staff. Allows the same network to be used by staff.
Access plan activation	*	Access plans can be programmed to be used from/until a particular date and time
Access plan period	*	Through the option CALENDER DAYS, the ability to show on the Guest portal selected access plans for fixed periods or a fixed date; Dynamic day/weekend/weekday.
Landing page field	*	A different landing page can be entered for each Billing or access plan
Port based policies (Only available using Tiger IPCX gateway)	*	Ability to allocate TCP and UDP port policies to individual billing and Free access plans. Example: HTTP and SMTP -> Free service All other ports are chargeable



Features	TigerTMS IPCL	Description
Limit max number of package on-line at the same time	*	<p>Max number of packages possible being on-line at the same time:</p> <p>Example: Package A, allows for high volume and high bandwidth traffic. (Example Sling box). However as the up and down volumes can be very high with this application, it would be unwise to allow unlimited number of "sling box packages" on-line, as it will monopolize the WAN connection and make it virtually impossible for a guest to surf or read emails..</p> <p>Therefore the IPCL billing plan has a "max number of packages on-line" parameter.</p> <p>Once a subscriber tries to buy a package which is already at its max number, the subscriber will get a portal page update, informing when a package covering his needs, will be available (date and time) for purchase.</p>
Prioritize data traffic through Traffic Shaping rules	*	<p>Rules can be configured to set higher priority data traffic of payable guests over those of guest using a free access plan. Rules are linked to room and/or guest profiles, so certain PMS based guest profiles can be linked to these plans holding priority traffic. IT Management has full control on how much data traffic priority is given to certain access plans.</p>
Billing plan groups	*	<p>Billing plans can be organized in groups. Only billing plans that are in a group flagged as voucher plans will show up in the subscriber add menus.</p>
Content Control (OPTIONAL)	*	<p>Ability to control which content is allowed to access and charge, based on URL's, actual content wording (with content view and automatic update via RSS) , file extensions; IP addresses and site names. This is all linked according to guest profiles.</p> <p>For example, parents would be able to activate "Parental Control" for preventing their children from accessing inappropriate websites.</p>
Bandwidth allocation through Traffic Shaping rules, based on user/guest profiles	*	<p>Example: Conference profile users enjoy a dedicated bandwidth which is taken from the general available WAN bandwidth. Allocation/de-allocation of dedicated bandwidth is done automatically upon PMS signal.(check-in/checkout). Conference users enjoy dedicated bandwidth regardless from where they are connected on the Guest LAN.</p>



Features	TigerTMS IPCL	Description
<b>Portal Management</b>		
Predefined portals	*	Predefined portals available with customization of text; buttons; colors and images. Unlimited number of predefined portals can be set-up
Customized portals	*	Unencrypted PHP pages allows for web designers to adapt portals on HTML level. Unlimited number of customized portals can be set-up
Internal portal call	*	Unencrypted Portal pages can be called from internal folders. Unlimited number of internal portals can be set-up
Gateway portal calls	*	Portals can be called from the local gateway.
External portal call	*	Portal pages can be called from external URL's. Unlimited number of external portals can be set-up
Predefined or customized Logout Window	*	Logout console informs subscriber at any time about time and/or volume left on account. Allows subscriber to manually end the internet session. At pre-defined time the Logout console can warn about the account that reached the end of connection time or volume
Ability to call external pre- and post authentication portals	*	Unencrypted redirection script files allows for calling external or internal pre- and /or post authentication portals, maintaining all specific browser parameters.
Customized logout consoles	*	Allows for unlimited customized logout consoles
Layout according to screen size	*	Supports PPC and future devices, based on the user agent. Different portal pages can be called depending on whether the wi-fi device is a laptop/play station/PDA/smart phone. User agent types are configurable
Banners	*	Possibility to upload different banners per portal for advertisement purposes
Hospitality portal (OPTIONAL )	*	Special unencrypted hospitality portal with as functions for the guest to read live streamed text messages; detailed bill info and express checkout possibilities. (* PMS dependable)
Support for portals that have blocked cookies and sessions cookies	*	Either the portal from the portal editor must be used; existing custom portals will need to be updated.
Full portal editor	*	Integrated portal editor with all available features (voucher / free access / credit card / view bill / text message / status page / upgrade page / custom pages). Complete customizable portal design via admin GUI. Translation via admin GUI.



Example screenshots of full portal editor: add/edit any portal page you would like.

Example screenshots of full portal edit: being able to alter any graphical item.



Example screenshots of full portal editor: alter and even create any kind of portal flow

The screenshot shows the 'Portal flow' editor in the TigerTMS system. The interface includes a toolbar with various icons for editing and a language dropdown set to 'English'. The main area is titled 'Portal flow' and contains several sections:

- In house guests:** Contains icons for 'Index\*', 'Login', 'Plan', and 'Popuppblocked'.
- Voucher:** Contains icons for 'Index\*', 'Login', 'Subscribe', 'Invoice', and 'Plan'.
- Free access:** Contains icons for 'Index\*' and 'Login'.
- Misc:** Contains icons for 'Forgot', 'Password', 'Upgrade', 'Messages', 'Bill\_records', and 'Status'.
- Custom pages:** Contains an icon for 'Toa'.

A 'Cancel' button is located at the bottom of the editor window.

Example screenshots of full portal editor: alter and even create any style, label

The screenshot shows the 'Options' dialog box in the TigerTMS system, specifically the 'Labels' tab. The dialog box has a toolbar and a language dropdown set to 'English'. It contains a grid of input fields for defining labels:

First name	<input type="text" value="First name"/>	Last name	<input type="text" value="Last name"/>
E-mail	<input type="text" value="E-mail"/>	Company	<input type="text" value="Company"/>
City	<input type="text" value="City"/>	Country	<input type="text" value="Country"/>
Street	<input type="text" value="Street"/>	Phone	<input type="text" value="Phone"/>
Add to mailing list	<input type="text" value="Add to mailing list"/>	Free access button	<input type="text" value="Continue"/>

At the bottom of the dialog box, there are 'Cancel' and 'Save' buttons, and a copyright notice: '2012 © TigerTMS'.



Features	TigerTMS IPCL	Description
<b>Payment types</b>		
Posting only via interface directly with PMS or via Tiger Hotel Cub/Pro Call Management.	*	Posting only interface via gateway. Support certified, direct PMS interface with Micros/Fidelio, OnQ, Protel etc FIAS interface (part no: 5009-147) or via Hotel Pro (part no: 5001-320)
Bidirectional interface directly with PMS or via Tiger Hotel Cub/Pro Call Management.	*	IP based interfaces with guest profile transfer with ability to post internet service even if the guest is connected over wifi. Authentication can be done on any guest profile field available in the Tiger Hotel Cub/Pro or PMS database: First Name; Last name; arrival date; departure date; VIP code; group number; loyalty membership number;...
Multiple PMS interfaces (OPTIONAL)		On the same IPCL, multiple PMS interfaces can be activated (Additional License per additional PMS interface)
Voucher	*	(See voucher management)
Credit card (OPTIONAL)	*	Certified IP based interfaces with clearing houses: Ogone; CCC; Ipayment ; Clear2Pay; Servired (Spain); Bankpass ; Transferuj; DIBS; new interfaces on demand.
Supports PayPal (OPTIONAL)	*	Ability to authenticate through a PayPal account
<b>Extra functions on Bi-Di Interface directly with PMS or Hotel Cub/Pro Call management.</b>		
Voicemail message waiting indication (OPTIONAL)	*	Possibility to receive a voice message waiting, via the subscriber portal, for informing the subscriber of a new voice message.
Text message waiting indication (OPTIONAL)	*	Possibility to receive a message waiting indication, via the subscriber portal, for informing the subscriber of an unread text message.
Text message content transfer (OPTIONAL)	*	Possibility to receive the content of a text message waiting and read it via the subscriber portal.
Wakeup set/cancel/change (OPTIONAL)	*	Possibility to send wakeup bookings/cancelations/changes. Subscriber is able to book/cancel/change wakeup time.
Scheduled Database swap	*	Allows for a database swap at a certain time per day
Manual database swap	*	Allows for a manually initiated database swap



Features	TigerTMS IPCL	Description
<b>Loyalty Membership Interface</b>		Ability to connect to global Membership databases via XML based IP interface
Authentication	*	Allows for authenticating subscribers based on entering their loyalty membership number
Special portal rules	*	Allows for showing special "Membership" portals based on whether the subscriber is authenticated via the membership number.
Special access plans	*	Allows for assigning special "Membership" access plans with special billing based on whether the subscriber is authenticated via the membership number.
<b>Rules Management</b>		
		Rules define, which portal; billing plans; print cost (print server is an optional module) and payment methods are offered depending on physical location or guest profile
Unlimited number of rules	*	
Physical locations	*	Rules can be linked to individual rooms; groups of rooms; room types; floors; SSID areas; IP-ranges;...
Guest profile dependable	*	Rules can be linked to VIP number or guest types; group numbers; loyalty numbers; and/or an guest profile field available in the PMS database
Prioritize portal page rules	*	Rules for portal page can be prioritized according to importance.
Automatic rule activation	*	Rules can be prepared and assigned to specific periods. These periods (Calendar days) can be: A fixed period , A fixed date Dynamic day/weekend All these periods can be further limited with time stamps (HHMM)
Device type based connection & security rules	*	By making use of the user agent parameter, IPCL is capable of allowing to setup connection & security rules for each type of device: PC; tablet; smartphone;... Connection parameters are configurable on OSI layer 2 (allocated bandwidth; port types and port numbers; number of connections and number of packages per second or minute.) and OSI layer 7: application. IPCL will pick up the device type and automatically apply the connection & security rule.
Regex help tool	*	Tool to assist with regular parameters required in rules
User upgrade rules	*	Upgrade rules that specifies which billing plans are available when a user upgrades From one billing/free/Q-o-S plan to another billing/free/Q-o-S plan



Features	TigerTMS IPCL	Description
<b>Intelligent user authentication field policies</b>		Ability to setup policies to be able to use intelligent authentication fields
Database fields	*	Applies on fields: Last name; First name; VIP and any User Definable field.
Number of characters to be checked	*	Ability to flexible setup the number of characters to be checked for authentication match
Position of Characters	*	Ability to configure the field positions on authentication queries
Filtering of Characters	*	Ability to filter spaces; dashes and single quotes out of the content of the authentication field.
<b>Local Print server (OPTIONAL)</b>		
Fast document upload	*	Module in order to allow guests to securely print documents
Secure printing	*	As the printer server runs on a local business center Windows PC, the document upload is extremely fast.
Billing	*	Making use of print release code
	*	Charges, discounted charges or free print services can be linked to guest profile(s).
No special PC hardware needed	*	No special PC hardware is required to run the print server. Any Windows workstation, with Microsoft Office (minimum Home edition) with a printer connected, is usable
File formats	*	Supports all Microsoft & Acrobat supportable files formats
Admin print job control	*	Administration access to control/reactivate print jobs
Print vouchers	*	Ability to create Print vouchers for non- resident users
Payment methods	*	PMS; Voucher; Pay-Pal
Print confirmation	*	User receives print confirmation screen on printer workstation, when print job is active



**Step 1:** Guest uploads document(s) from the Print portal. Print portal is accessible from authentication portal or by typing "Print me" or any other DNS name in the browser address bar.

<p><u>Upload document</u></p> <p>Here you can upload documents that will be send to the print server.</p> <p><u>Documents options</u></p> <p>As soon as a document has been sent to the server, a list of options will appear</p> <p><u>Supported file extensions</u></p> <p>doc, docx, dotx, dot, html, rtf, txt, xml, odt          png, jpg, jpeg, gif, bmp, tif, tiff          pptx, ppt, potx, pot, odp          pdf          xlsx, xls, xltx, xlt, csv, ods</p>	<p><u>Upload</u></p> <p><input type="text"/> <input type="button" value="Bladeren..."/></p> <hr/> <p>File: Guest_Internet_Confi... Pages: 16</p> <p>Printer Bullzip PDF Printer</p> <p>Page range  <input checked="" type="radio"/> All  <input type="radio"/> 1-16</p> <p>Copies Number of Copies: 1</p> <p><input type="button" value="Cancel"/> <input type="button" value="Continue"/></p>
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**Step 2:** If not yet authenticated, guest needs to enter authentication fields. Price and discount will be indicated, if guest profile is setup for charging/discounts.

<p><u>Release code</u></p> <p>Please select all documents you wish to print, a release code will then be generated for the selected documents.</p>	<p style="text-align: center;">1. Documents    2. <u>Payment method</u>    3. Release code</p> <p>Total pages: 16 Price: 16 EUR</p> <p><b>Bill my room</b> <input type="button" value="⊕"/></p> <p>Room: <input type="text" value="101"/>          Last name: <input type="text"/>  <input type="button" value="Verify"/></p> <p><b>Voucher</b> <input type="button" value="⊕"/></p> <p><b>PayPal</b> <input type="button" value="⊕"/></p> <p><input type="button" value="⏪ previous"/></p>
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**Step 3:** Guest receives a release code for printing.

<p><u>Release code</u></p> <p>Please select all documents you wish to print, a release code will then be generated for the selected documents.</p>	<p>1. Documents    2. Payment method    3. <u>Release code</u></p> <p>Your release code: 255185</p> <p><input type="button" value="Back"/></p>
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**Step 4:** Guest enters the release code at the workstation connected to the printer, running the IPCL printer server.

Print server

TIGER tms 

print server

Enter your release code and press "print" to start printing

<p>Release code</p> <p>255185 <input type="button" value="Print"/></p>
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[Administrator login](#)



Features	TigerTMS IPCL	Description
<b>Voucher management</b>	*	
Individual vouchers	*	Creation of individual vouchers ad-hoc with free definable billing plan
Multiple vouchers	*	Multiple vouchers may be created in batches of a free definable number and to free definable billing plans
Voucher templates	*	Unlimited voucher templates are possible. Templates are in RTF file format, so easy to customize.
Voucher financial value balancing	*	At activation of voucher, voucher value might be send to PMS for end-of-day financial balancing
Voucher storage	*	All created vouchers are built as RTF or Excel files and stored as ZIP files in predefined folders
Voucher search	*	
Voucher code	*	Voucher code login instead of Username and Password
Voucher Serial number	*	Vouchers can contain a serial number for easy tracking
Voucher template creator/editor	*	No need for an external program to create templates, you can now use the template creator in the IPCL and this will generate a PDF with the created vouchers.
Support 3 button ticket printers	*	Multiple 3 button ticket printers can be accessed for printing ad-hoc vouchers from a specific Point-of-Sale locations.
<b>REPORTS</b>	*	
Revenue	*	Revenue reports are possible per day; month and year. Split out into payment methods: PMS; voucher and Credit Card
Subscribers	*	Number of active subscribers per day; month and year. Split out into payment methods: PMS; voucher and Credit Card
Volume	*	Number of traffic (up and down) per day; month and year. Split out into payment methods: PMS; voucher and Credit Card
Internet Session info export to Excel file	*	Possibility to export subscriber info with filtering possibilities on: date; username; MAC address; room number; Billing plan; traffic inbound and outbound in Kbytes and time left on subscriber account
Revenue Export report	*	Ability to export a revenue report for accounting purpose giving a start and end date. Export sheet is in Excel format.
WAN bandwidth usage	*	Shows usage of bandwidth on WAN side



Features	TigerTMS IPCL	Description
Dashboard overview	*	Widgets can be activated on the home dashboard in order to have instant overview on: <ul style="list-style-type: none"> <li>- User statistics</li> <li>- User History</li> <li>- Concurrent user license usage</li> <li>- System Health</li> <li>- WAN Bandwidth usage per WAN connection</li> <li>- Number of users on line</li> <li>- Maintenance contract expiration date</li> <li>- New software update availability</li> <li>- IP address Lease report</li> <li>- Room Occupancy report</li> </ul>
<b>Security &amp; logging</b>	*	
Intrusion detection	*	Malicious users can be blocked and IP addresses can be band to a "black list"
Black list	*	
White list	*	
Law full interception (Standard for European countries; Available as an option outside Europe) EU-Data Retention (2006/24/EG)	*	All subscriber activity is logged in order to comply with local country security regulations. Parameters logged are: date ;site; direction; source IP; source port; destination IP; destination port; gateway; proxy; MAC address; authentication and user
URL logging	*	Ability to activate URL logging: logging user activity which URL they have visited, including info such as date; MAC address; username; IP address and URL page, visited. This feature can be deactivated for legal purposes.
Clustered Fail-over (Optional)	*	Ability to install a second IPCL for full redundancy: TIPCL will fail over connections automatically to the second IPCL upon no response of the primary one, after a predefined time.
Anti-Spam or session rate limitation	*	Limitation of number of sessions per time unit (hours; minutes; seconds): Example: More than 200 SMTP sessions/minute are blocked Session rate limitation rules are allocated to a billing or access plan.
Multiple ISP support: Load Balancing with failover function	*	Load Balancing and Fail-over on WAN side. Up to 4 physical WAN Ethernet connections in Load Balance mode, but not limited to. Unlimited VLAN tagged based WAN connections in Load Balancing, are supported. Each WAN interface can be selected if used as load balanced WAN or as exclusive WAN fail-over interface
Anti-spoofing security	*	Anti MAC address based spoofing security. Prevents malicious access with fake MAC addresses / accounts.
Packet capturing	*	Management interface allows for packet captures for troubleshooting network problems



AAA log	*	
XML log	*	
Local user log	*	
PMS interface log	*	
System log	*	
Agent log	*	
Law full Interception Log EU-Data Retention (2006/24/EG)	*	
Loyalty Membership Log	*	
System backup ftp log	*	
Packet capturing via GUI for troubleshooting	*	Allows detailed TCP/UDP capturing for in-depth traffic analysis



**Summary of IPCL-100/500/5000 Gateway**

It is a platform designed for easy management / authentication and billing for small to large scale networks. It provides a user-friendly GUI for the offering of extra services and creation of additional revenue. Thanks to the high level security functions, you can safely offer internet to your customers and be rest assured internet service is controlled at all times.



**Authentication & Authorization**

Every subscriber needs to log in before accessing the internet, so no unwanted subscribers can use the internet in your property. The IPCL supports multiple authentication protocols:

- UAM (Universal Access Method) with captive portal over SSL
- MAC-based authentication
- WPA 802.1X

Local Authentication  
 Radius Authentication  
 Single click authentication for complimentary access

**Billing & Payment methods**

The IPCL platform creates an opportunity to gain extra revenue. You can create your own billing plans and payment can be done in different ways:

- **Voucher:** full voucher management
- **credit card** (Optional Module)
- **PMS** (Optional Module)

Billing and access plans can be unlimited number of pre-paid; post-paid or special free plans and is subscriber profile based. The IPCL supports multiple credit card clearing houses.

**Integrated Firewall**

**Integrated Firewall**

**Lawful Interception** EU-Data Retention (2006/24/EG): Keeps track of the IP-addresses visited by the subscribers, which makes sure in case of internet abuse, the violator can be traced.

**White list / Black list:** Predefine websites may be visited without authentication/ URL and IP address filtering.

**MRM (Mail Rate Monitoring):** Anti SPAM function

**SRM (Session Rate Monitoring):** if a subscriber sets up too many connections, Session Rate Monitoring makes it possible to:

- Log out subscriber
- Block subscriber
- Limit access to web

**Intrusion Detection**

**Spoofing Detection:** Mac addresses spoofing

**Network features**

**Any IP / Any DNS:** Subscribers don't need to change anything in their IP-configuration, which makes it extremely easy to connect to the network

**Time, Bandwidth and Volume-management:** makes it possible to manage and spread the load on your network

**Wired / Wireless:** The IPCL works on any network environment: wired; wireless; ...

**DHCP Server:** Automatic IP configuration for all subscribers

**RADIUS Roaming**

**NAT** (Network Address Translation)

**Dyn DNS client**

**802.1Q VLAN Tagging**



**Portal page**

**Management**

**Portal Page redirect:** Subscribers who want to access the internet are redirected to a portal page to log in. This portal page is completely customizable and can match the corporate design of the property.

- **PDA-friendly portal pages**
- **Portal Page Wizard:** Easily create your own personalized portal page.
- **Unlimited number of custom portals loadable**
- **Pop-up blocker detection**
- **Multiple Browser Support**

**PMS Integration & services (Optional)**

Certified Micro/Fidelio interface

Type: FIAS Serial or FIAS IP supporting shared guest profiles

OnQ PMS connection

Protel PMS connection

The PMS module (Property Management System) will allow creating a richer guest experience:

- charge internet access to guest account
- view PMS stored text messages on guest portal
- view detailed bill on guest portal
- check out via internet
- posting of voucher values for financial balancing
- access to Tigers XML based guest services guest portal

**Reporting & Monitoring**

**Reports:** Revenue, data usage and subscriber reports show all user activity, transferred data and the revenue that was made in your property. Reports on a daily, monthly or yearly basis.

Broken down figures according to payment method

Subscriber session tracing with filter possibilities

**Gateway Health Status:** alarming via email

**Network device monitoring based on SNMP query:**

Alarming via email

**Multiple Administrators:** multiple administrators can be created, each with their own rights and restrictions.

**Subscriber management:** via internal database or external radius. Creation of subscribers based upon the defined billing plans.

**Centralized Management:** manage multiple gateways centrally (optional module).

**Logging:**

- RADIUS log
- System log
- Syslog
- Interface log

**Meeting Room Scheduler**

**SSL Encrypted:** Management interface over https.

**Hardware specifications**

- 10/100/1000 BASE-T LAN port
- 10/100/1000 BASE-T WAN port
- 10/100/1000 BASE-T for possible PMS interface
- DB9 serial for possible PMS interface
- Rack mountable (1u, 19 inch)
- Dimensions:
  - Height: 1.7" (43mm)
  - Width: 17.2" (437 mm)
  - Depth: 9.8" (249 mm)
  - Gross Weight: 10 lbs (4.5 kg)
- Temperature:
  - Operating: 10 – 35 °C (50° - 95°F)
  - Non-Operating: - 40 - 70 °C (-40° - 158°F)

**Subscriber Access**

SMTP Redirect

NAT (Network Address Translation)

VPN pass-through

RADIUS Client / RADIUS Proxy

Log out console

Smart URLs

Registration Mail