



**You and  
your devices,  
together  
everywhere**

**Cloud-based  
Remote  
Connectivity**

**www.ewon.biz**

Talk2M is the first secure industrial connectivity service in the cloud. With servers spread out all over the world, Talk2M offers a highly reliable, efficient and secure solution for connecting to machines remotely. Talk2M gathers thousands of accounts and manages thousands of connections per day including full audit trail connection tracking.



# The first industrial cloud for remote connectivity

## M2M – MACHINE TO MACHINE – MARKET OFFER NEW OPPORTUNITY

Global competition, government regulations, energy efficiency, costs reduction, business innovation requirements, labor costs, pressure on price, production optimization, ... All of this creates significant challenges for industrial organizations.

Machine-to-Machine (M2M) communication now offers these organizations new opportunities to address these challenges by creating a new source of revenue and innovative services. M2M connectivity is changing the way the business is running! More and more machines and industrial devices are connected thanks to Ethernet and wireless network to create the IoT – Internet of Things. Some analysts predict billions of connected devices around 2020...

## TALK2M, AN INNOVATIVE INDUSTRIAL CONNECTIVITY CLOUD SOLUTION

To help you benefit from M2M connectivity, eWON has developed Talk2M. Talk2M comprises fully secure, scalable cloud M2M connectivity services which seamlessly connect industrial machines and remote sites. Talk2M saves you the hassle of implementing large scale and/or worldwide remote access infrastructure involving many different technologies.

# What is Talk2M?

“Talk2M helps you to revolutionize your customer service and demonstrate your added-value”

Launched in 2006, Talk2M is an innovative solution, offering to OEMs, Machine Builders and System Integrators the most mature, stable and reliable solution to connect machines and devices remotely.

**With Talk2M, you move from a typical reactive customer service to a proactive and innovative business model, with the generation of new revenue streams.**

The Talk2M added-value is to provide a secure worldwide industrial communication gateway to your remote industrial assets, compliant with IT corporate standards, and offering a high level of reliability for:

- remote maintenance
- remote diagnostics
- remote data collection
- remote access to machines and devices.

Talk2M was the first cloud-based industrial connectivity solution. This pioneering and innovative solution has been quickly adopted by major industrial actors becoming a reference in the industry. The fast growth encountered with Talk2M brought us vast experience in terms of security, scalability, availability and user experience. By design, Talk2M has been created to be able to connect to several thousands of remote devices.

### Moving from a reactive customer service to a proactive and innovative business model

- o Business process optimization : control, monitoring, reporting and maintenance
- o Cost reduction: on-site travel cost avoidance, fine tuning during commissioning period, remote data collection for monitoring, automated business process,...
- o New source of revenues: development of new innovative applications based on automated monitoring and prediction of industrial assets and machines
- o Regulations compliance: quality improvement, energy efficiency, CO2 ,...
- o Improve competitive differentiation by increasing added value
- o Energy efficiency





# Why Talk2M is your best choice for connecting industrial devices

## SECURITY

With several thousands of industrial devices already connected to Talk2M, we understand how important security is when carrying out secure remote access operations. Security remains Talk2M's number 1 priority which is backed up by an ongoing investment plan. Security comprises a large number of aspects, such as processes, technology, testing, risk analysis and audit trails ensuring top confidentiality, integrity and availability of Talk2M.

**Security is Talk2M's #1 priority**

Our high security level is reached by :

- Secure and robust communication architecture between the eWON routers and the Talk2M servers, as well as between the Talk2M servers and the Talk2M applications. For that, we use recognized secure technology, protocols and algorithm standards such as SSL/TLS, ESP, X509 PKI, EVP-DES, 3DES, AES, BF, HMAC-SHA1, IPSEC...
- Strict firewall rules inside eWON routers
- Access & device control for Talk2M applications
- A premium hosting provider for the Talk2M Pro servers & infrastructure with SSAE-16 (former SAS70 II) and ISO27001 certified facilities.
- Permanent audit trail of all Talk2M servers
- Asset monitoring by on-duty engineers and 365/24/7 monitoring of the Talk2M infrastructure assets.

## HIGH AVAILABILITY

After security aspects, the second-highest priority of Talk2M is to provide the best possible business continuity of its services. Talk2M Pro\* services provide first class 'mission critical' hosting services with business continuity of 99,6% over a one-year period with a maximum breakdown of 4 consecutive hours. Talk2M Pro services are guaranteed through SLA (Service Level Agreement).

**99,6% per year availability SLA**

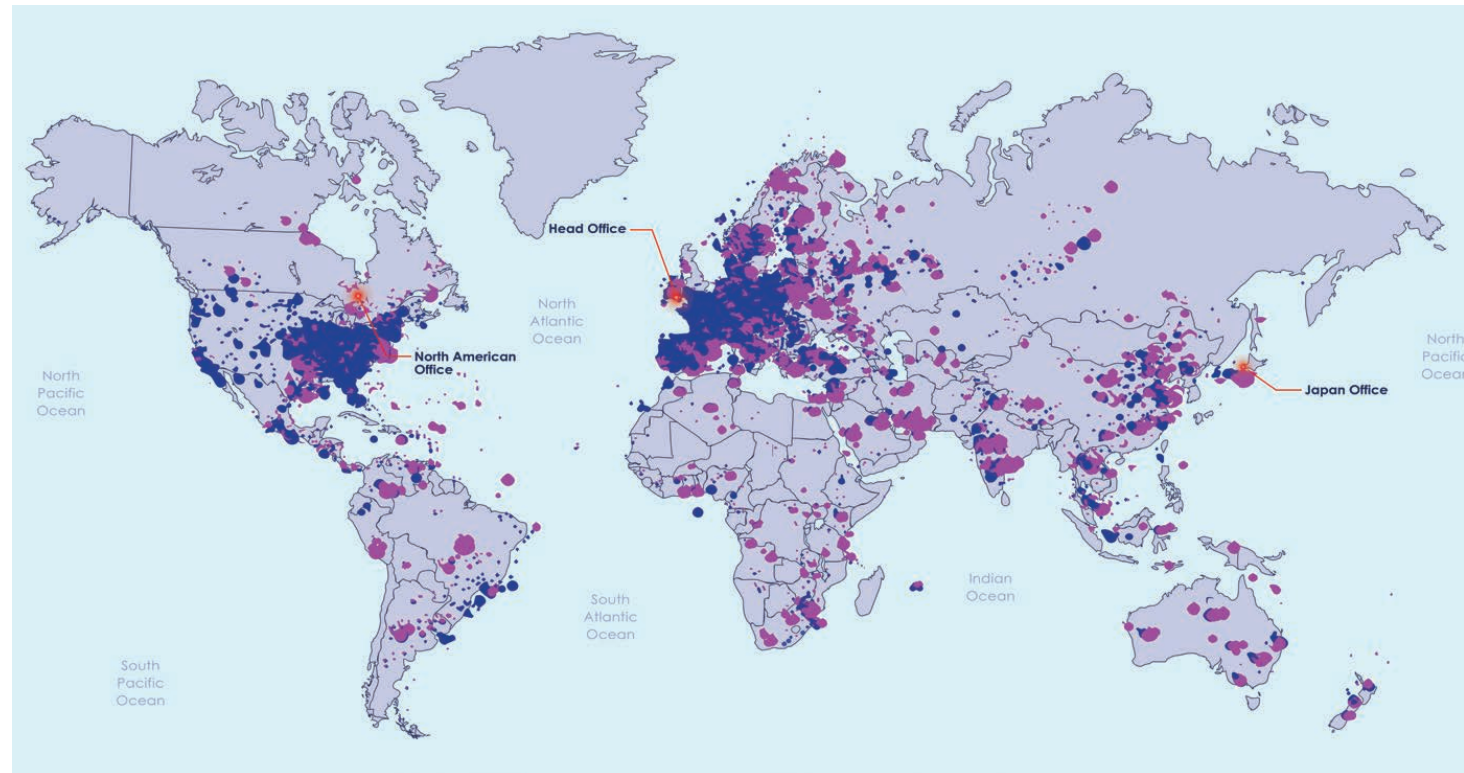
The Talk2M architecture is reinforced by several actions and control objectives such as:

- High SLA level from our Talk2M hosting suppliers and Internet providers
- Talk2M servers spread worldwide, with several world-class hosting companies
- Servers roll-out between the different Internet providers
- Monitoring and alarms management system for key performance indicators on all Talk2M servers
- On-duty 365/24/7 engineers

\*Talk2M is first and foremost a free connectivity service, called Talk2M Free+, with unlimited-in-time free connectivity for tests, proof of concept or for a small number of devices deployment.

# Inside Talk2M

“With our infrastructure, we have already achieved 3,000,000 VPN connections”



## WORLDWIDE SERVERS

To improve remote access performance and reduce the latency time, Talk2M has several servers located in major countries and on different continents. Thanks to eWON IP geo-localization, Talk2M is able to select the best server connection and minimize the latency time between IP packets.

## INNOVATIVE SECURE SOLUTION

Talk2M has been designed to resolve the complexity of infrastructure and security implementation required in remote access applications. Talk2M VPN connections are built using advanced standard security and cryptography protocols such as X509, SSL/TLS and ESP, on port 1194 or 443. The exchange of X509 certificates and private keys is secured by the same class of advanced cryptography protocols (HTTPS, SSL/TLS). Both eWON devices and the eCatcher application connect to Talk2M using a VPN tunnel. Advanced routing techniques are implemented in the Talk2M VPN servers to ensure that only authorized users may communicate with your assets.

## UNIFIED COMMUNICATION

A major benefit of Talk2M is the native support of all communication technologies. No matter which communication method is used (LAN, ADSL, 2G, 3G, LTE, WiFi, CDMA...), Talk2M will always offer the same user experience and same tools.

## Benefits of remote access

# Remote Access with Talk2M

"You will always find the right way to connect your remote devices"

- **IMPROVE YOUR REACTIVITY AND CUSTOMER SATISFACTION DURING COMMISSIONING AND AFTER-SALES SERVICES**
- **REDUCE YOUR TRAVEL COSTS**
- **KEEP YOUR KEY ENGINEER IN-HOUSE**
- **BUILD THE FOUNDATIONS OF NEW BUSINESS SERVICES!**

## EASY TO DEPLOY

Anyone who has already set up a M2M communication, or more specifically a VPN connection, knows that it is not an easy task and that it requires a lot of skill. The main challenge (and cost) in the industrial M2M world is to be able to successfully deploy a large number of remote devices within a short period of time without dedicated resources. Thanks to the perfect integration between eWON routers and Talk2M, the remote devices and sites can be connected in minutes... without compromising on security!

## SMS & EMAIL RELAY FOR ALARM MANAGEMENT

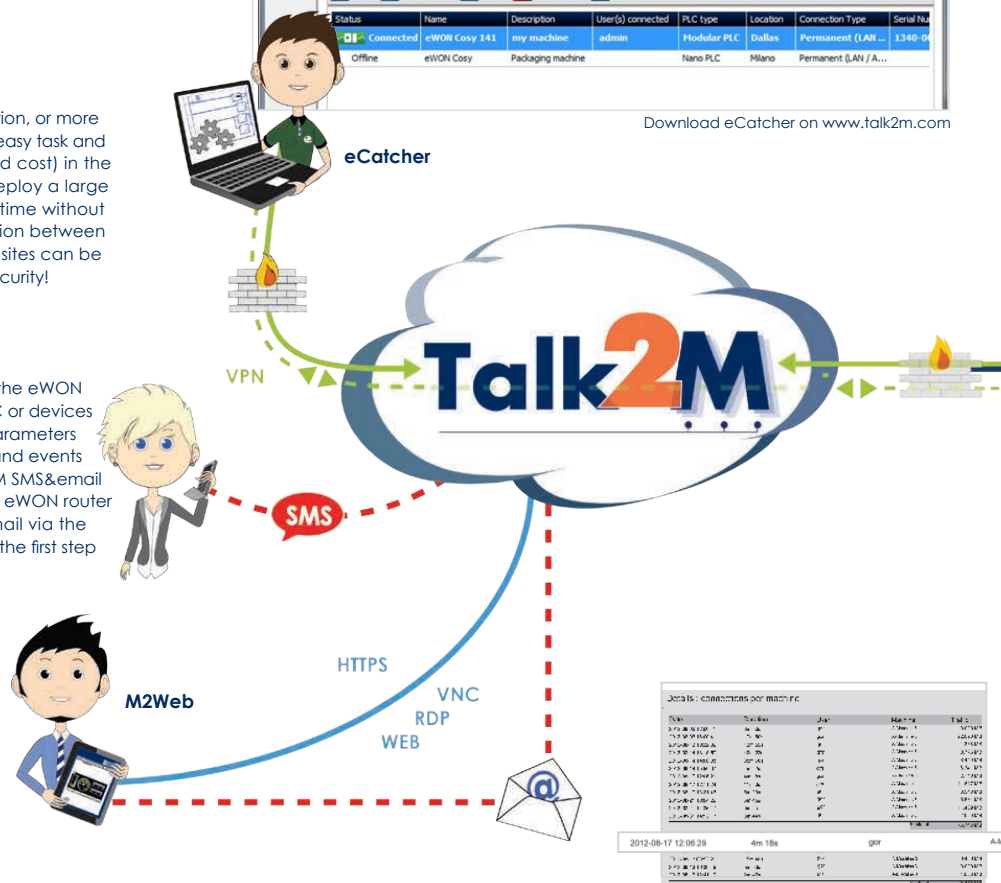
Thanks to the various industrial protocols supported, the eWON router is able to gather data from your industrial PLC or devices and manage its alarms. Alarms threshold (4x) and parameters (delay, deadband) can be set on every tag name and events can be notified using FTP, SNMP, email or SMS. Talk2M SMS & email relay will relay the alarm into SMS (without having an eWON router equipped with a cellular modem) and relay an email via the Talk2M SMTP server. This Talk2M alarms notification is the first step towards a proactive remote services model.

## M2WEB: REMOTE ACCESS TO HMI

M2Web allows you to have secure mobile web access to any remote HMI (VNC, RDP) or web server located on the eWON device itself or behind (LAN devices).

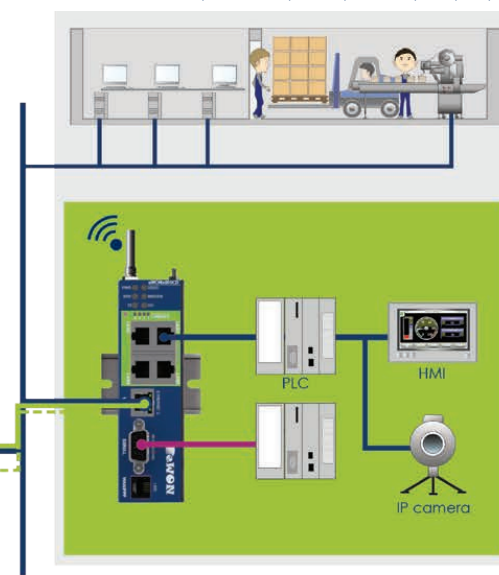


Download eCatcher on [www.talk2m.com](http://www.talk2m.com)



## ECATCHER : THE TALK2M REMOTE ACCESS CLIENT

eCatcher is the remote access client of Talk2M. After a credentials check, authenticated users are able to access, in a single click, their list of eWON devices i.e. their remote sites. More than a simple repository, eCatcher helps industrial organizations to manage eWON devices and users into groups. The user interface has been designed to allow fast searching using custom fields and to display a device tree view showing all devices behind the eWON such as PLC, controller, driver, inverter, HMI, PC, etc.



## POWERFUL ACCESS CONTROL IMPROVING SECURITY

As remote access remains an important operation in terms of security, Talk2M Pro service provides a powerful access control process available through eCatcher. Talk2M Pro account administrators can easily grant access rights to a user or users group for a complete site, i.e the eWON and all devices behind, or to a single device located on the eWON LAN. This allows restrictive access to what is really required and thus avoids errors or unwanted remote actions.

## CONNECTION AUDIT TRAIL

Detailed reports are available including all information required to trace all remote connections (date time, user name, machine, connection time and traffic).

# Design your remote monitoring project

# Talk2M and your data

"Go beyond connectivity!"

## M2U

**PUSH MODE FOR COLLECTING DATA FROM YOUR REMOTE ASSETS, SITES AND MACHINES.**

### M2U, A SECURE DATA ACQUISITION PIPE

M2U provides a bidirectional HTTPS "pipe" to collect data from your remote devices connected to Talk2M. Using M2U, the remote devices initiate a secure HTTPS connection across Talk2M and push their data to your own data collection server.

### THE PUSH METHOD IS THE PREFERRED WAY TO COLLECT DATA

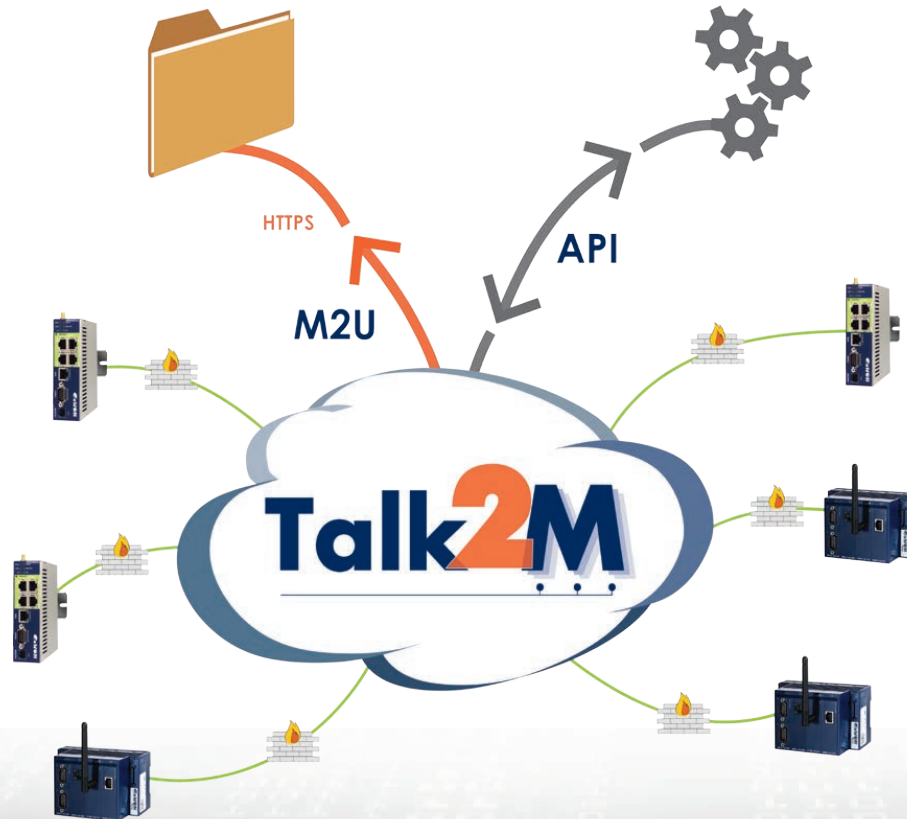
Although Talk2M is highly available, the connectivity to your remote site depends on both the local LAN or wireless network availability and the Internet connection. Therefore, the classical data pulling method cannot be applied. The 'Push' method, letting the device push its data to a central server is highly preferred because the device can control the communication to the end-point (your HTTPS server).

### DATA INTEGRITY

Talk2M does not buffer or store any of your data. Talk2M's role is to provide a secure 'pipe' between your remote device and your HTTPS data collection server. In the event that your HTTPS server is not available, an error will be sent to your remote device and data will be resent later. M2U is therefore an HTTP relaying mechanism between the device and your server.

### REMOTE DATA ACQUISITION WITH EWON

Thanks to the support of a large set of protocols, the tag features and the data logging, the eWON router is a perfect device to store and forward data to your own HTTPS server.



## API

**THE TALK2M API IS A POWERFUL WAY TO BUILD DEDICATED ADDED-VALUE BUSINESS SOFTWARE APPLICATIONS.**

### M2WEB HTTPS API

The M2WEB HTTPS API allows stateless HTTPS requests to any remote devices connected to Talk2M. Typical applications include:

- Sending control commands to a remote site
- Mobile Apps for remote monitoring
- Access to remote Web services
- Data collection from remote sites

### API SECURITY

For security reasons, every Talk2M API needs a unique identifier (Talk2M Developer ID) to access the Talk2M server. The Talk2M Developer ID is provided free of charge upon submission of the Talk2M API application form.

### DATA ACCESS

With the M2WEB HTTPS API, industrial software applications can easily access any web service located in industrial devices connected to an eWON router or can access the eWON's data (tags, data logging, config files, custom pages and forms). Documentation and eWON monitoring and control sample applications are available on our Developer website.

You are a developer or an eWON Partner ?  
Further information about M2U and the Talk2M API can be found on [developer.ewon.biz](http://developer.ewon.biz)



What do eWON Partners offer ?

- Added-value software solutions fully compatible with eWON and Talk2M products
- Talk2M add-on software to improve time-to-market and reduce your investment



# eWON industrial routers

## Industrial M2M Router & Data gateway

Flexy 201	Flexy 202	Flexy 203
4x 10/100MB (LAN)	1x 10/100MB (LAN) 1x RS232/422/485	1x 10/100MB (LAN) 1x MPI/Profibus
Extension cards: WAN, 3G+, PSTN, WiFi, CDMA, Dual Serial Ports,...		

**Flexy**

## Industrial VPN Router

2005CD	4005CD
4x 10/100Mb (LAN) 1x 10/100Mb (WAN) 1 x RS232/485 or MPI/Profibus	2005CD +Alarming + Data logging
Optional modem : PSTN, ISDN, HSUPA	

**CD**

## Industrial Remote Access Router

Cosy 141	Cosy 131
LAN/WAN/Serial or LAN/WAN/MPI	LAN/WAN/USB + WiFi or Cellular

**Cosy 1 2 3**

# Connecting devices to Talk2M

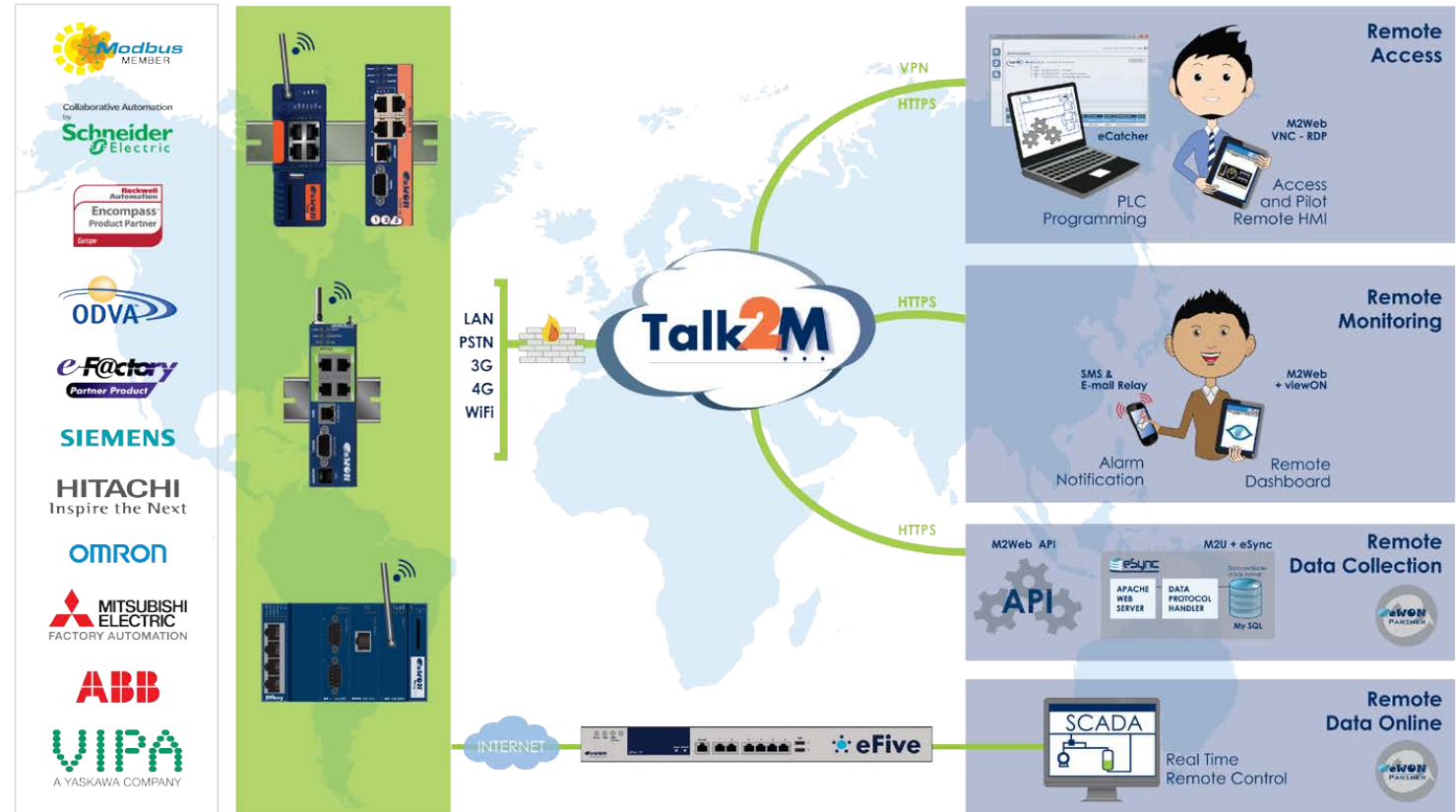
"You will always find the right way to connect your remote sites"

Field Connectivity

M2M Routers & Data Gateways

Remote Connectivity

Remote Access and Data Services



Our customers speak best for us! Read our success stories: <http://www.ewon.biz/customers>



## Select your Talk2M service

	Talk2M services	
	Free+	Pro
Unlimited no. of machines	•	•
Unlimited no. of users	•	•
No. of concurrent eCatcher connections	1	3
No. of M2Web sessions*	3	Unlimited
Data traffic per month	1 GB	6 GB
Connection reporting	•	•
M2U for data collection (push)	•	•
SLA (99,6% availability, 4hr. max. consecutive downtime)		•
Wake-up/Alarm SMS per month		50
Advanced Access control		•
Pricing	<b>Free</b>	<b>Yearly fee</b> Part number: TM500141
Additional traffic, SMS, Concurrent connections	N/A	Extra fee

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