MAINTENANCE WITHOUT TRAVELLING

M2Me solution is dedicated to remotely maintain and control any type of industrial devices (PLC, HMI, Drive, ...).
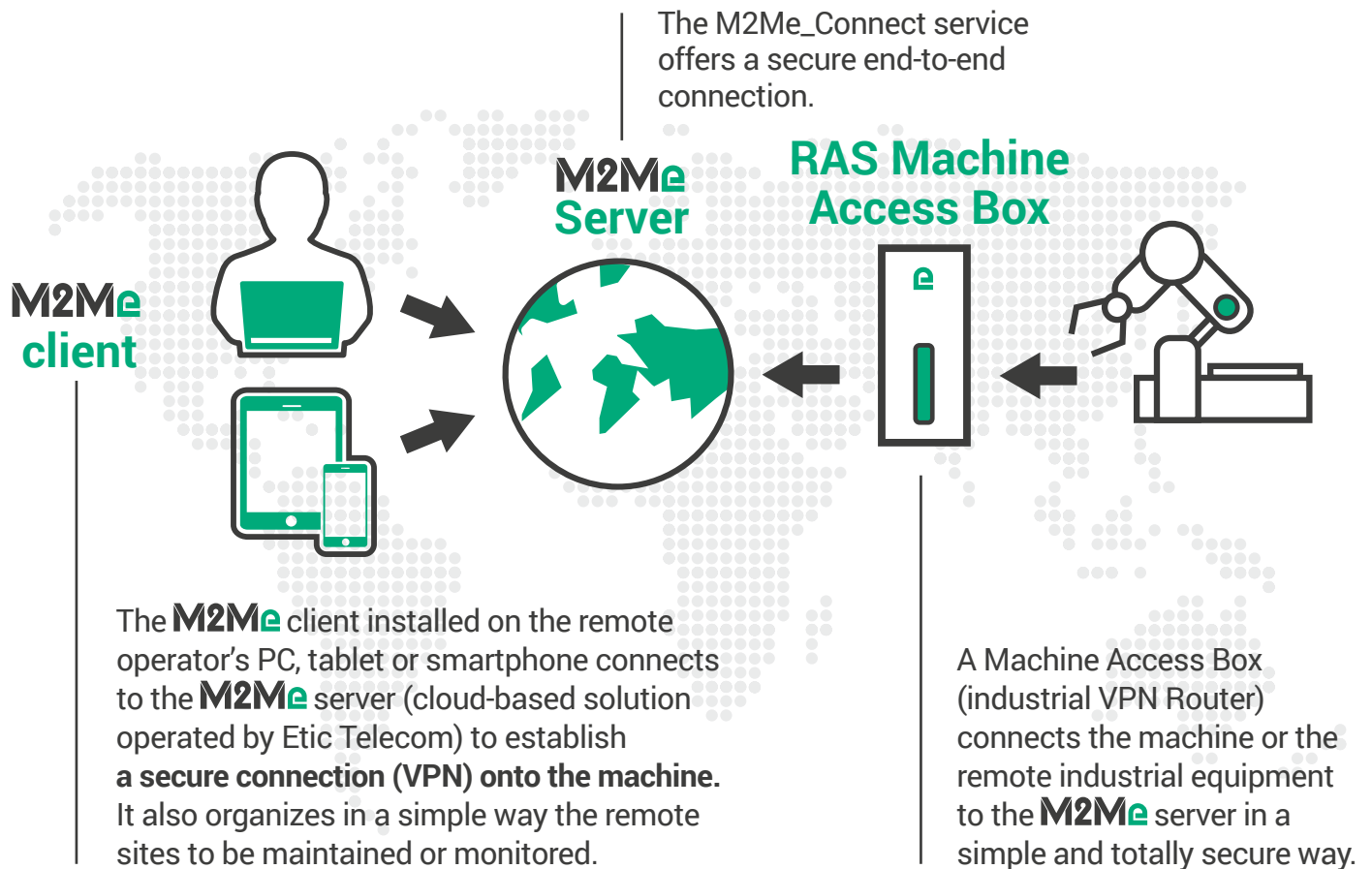
Using **M2Me** you can from your PC, your tablet or your smartphone be «teleported» in real time and safely onto the remote site you want to monitor or maintain.

RAS Machine Access Box

- **Simple configuration** (Wizard)

- **Ultra-secure connection**

- **MultiWAN** (Ethernet, 4G/3G+, Wi-Fi)

- **Wi-Fi** (Access point and client)

- **Data logger & alarms** (SMS, E-mail, e*message)

- **Connection from a tablet, a PC, a smartphone**

- **Tracking (GPS)**

- **Compatible with Schneider, Siemens, Rockwell, Mitsubishi, ABB,...**

- **5 years warranty**

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CE   MADE IN FRANCE · FABRIQUE EN FRANCE   RoHS 2002/95/EC   REACH COMPLIANCE

THE M2Me SOLUTION

The M2Me_Connect service offers a secure end-to-end connection.

M2Me Server

RAS Machine Access Box

M2Me client

The **M2Me** client installed on the remote operator's PC, tablet or smartphone connects to the **M2Me** server (cloud-based solution operated by Etic Telecom) to establish **a secure connection (VPN) onto the machine.** It also organizes in a simple way the remote sites to be maintained or monitored.

A Machine Access Box (industrial VPN Router) connects the machine or the remote industrial equipment to the **M2Me** server in a simple and totally secure way.

ADVANTAGES

Simplicity of implementation
RAS is delivered together with a Wizard.

Plant network integrity
The RAS establishes an outgoing VPN connection that does not require any modification of the existing plant network (firewall, proxy, …).

A non-intrusive solution
The **M2Me** technology guarantees that the operator can only connect to the machine network and in no case to the other equipment of the industrial site.

A secure solution
M2Me relies on VPN technology and implements authentication to the **M2Me** server by certificates for the remote user and the RAS.

Management of access rights
The RAS allows a personalized management of access rights allowing an operator to connect to all or part of the equipment.

3/4G Wireless solution for isolated sites
Some RAS have a 3G + or 4G connection to establish an Internet link through a cellular network.

Wireless access to industrial equipment
Some machines may be difficult to access in the factory. The optional RAS Wi-Fi hotspot allows you to remotely configure the Machine Access Box from a PC or a tablet.

Wireless Internet access via Wi-Fi
The RAS optionally has a Wi-Fi client that allows access to the Internet via a Wi-Fi access point of the industrial site or by using its smartphone in connection-sharing mode.

Solution compatible with alarms sending and data logger
The Alert & Display option allows the raising of alarms and its transmission (CSV files). The alerted manager can then visualize Web pages or take the hand (VPN) on the PLC or the HMI of the machine.

A sustainable solution
The RAS is an industrial device with 5 years warranty.

GARANTY 5 YEARS GARANTY

RAS & M2Me

SELECTION GUIDE

RAS-	E-100	EW-100	C-100	E-400	E-220	EW-400	EW-220	EC-400	EC-220	ECW-400	ECW-220	M156E
WAN: Ethernet	1	1		1	1	1	1	1	1	1	1	
WAN: cellular (-HG : 3G+, -LE : 4G)			1					1	1	1	1	
WAN: PSTN												1
Wi-Fi (Access point and client)		1 (2.4 GHz)				1 (2.4/5 GHz)	1 (2.4/5 GHz)			1 (2.4/5 GHz)	1 (2.4/5 GHz)	
LAN: Ethernet 10-100 Mb/s	1	1	1	4	2	4	2	4	2	4	2	
LAN: Ethernet 10 Mb/s												1
Serial link RS232 / RS485					✓		✓		✓		✓	
USB link (PLC connection, data logging)				1	1	1	1	1	1	1	1	
GPS Option (avec ANT405)				✓	✓	✓	✓	✓	✓	✓	✓	
2 power inputs				✓	✓	✓	✓	✓	✓	✓	✓	
2 SIM readers								✓	✓	✓	✓	

ACCESSORIES

	ANT305	ANT310	ANT320	ANT217	ANT311	ANT219	ANT405
Type	Panel Mount	Roof	Magnet	Panel Mount	Roof	Magnet	Magnet
Network	2G – 3G – 4G	2G – 3G – 4G	2G – 3G – 4G	Wi-Fi (2.4 and 5 GHz)	Wi-Fi (2.4 and 5 GHz)	Wi-Fi (2.4 GHz)	GPS (1.57 GHz)
Connector	Male SMA	Male SMA	Male SMA	Male RP SMA	Male RP SMA	Male RP SMA	USB
Cable	-	5m	3m	-	3m/5m	1m	3m
Dimensions	H = 82mm Ø = 48mm	H = 82mm Ø = 48mm	H = 82mm Ø = 48mm	H = 90mm	H = 82mm Ø = 48mm	-	H = 15mm Ø = 38mm
5m coaxial extension : CO-LL6-SF-SM-500							

RAS & M2Me

TECHNICAL CHARACTERISTICS

GENERAL CHARACTERISTICS

Dimensions	• RAS-X-100 : 120x37x88mm (h,l,d) • RAS-E : 135x47x115mm (h,l,d) • RAS-M : 130x38x110mm (h,l,d)
Weight	Between 500g and 650g depending on model (without packaging)
Power	• RAS-X-100 : 10 - 30 VDC • RAS-E : 10 - 60 VDC • RAS-M : 10 - 160 VDC • Phoenix connector 2 points
Consumption	• RAS-E or RAS-M : 2W • RAS-EC or RAS-ECW : 4W
Temperature	-20°C to + 70°C (• LTE : 60°C • -40°C with tropicalisation • Humidity 5 to 95%)
CEM	Immunity (EN 61000-6-2) • EN61000-4-2 : Electrostatic discharge (ESD) • EN61000-4-3 : RF radiated • EN61000-4-4 : EFT/Burst • EN61000-4-5 : Surge • EN61000-4-6 : RF Conducted Emission (EN 61000-6-4) • EN 55022 : Radiated and Conducted emission
Electrical Safety	EN 60950
Hazardous substances	• Directive 2002/95/CE (RoHS) • REACH
Casing	Metallic IP20 with DINRail mounting

WAN NETWORK

Ethernet	• RJ45 • Auto: 10/100 full & half MDI/MDI-X
4G/3G+	• 4G LTE Europe, USA, Asia, China • 3G+ HSUPA "world wide" 850/900/1700/1900/2100 MHz • Max. data rate 4G: UL @ 50 Mbps and DL @ 100Mbps • Max. data rate 3G+ : UL @ 5,7 Mbps and DL @ 21 Mbps • Max. data rate 2G : UL @ 237 Kbps and DL @ 237 Kbps • Antenna connector Female SMA • Certified antennas: see selection guide
Wi-Fi	• Client 2.4 and 5 GHz depending on model • 802.11 a/b/g/n and super AG • Antenna connector Female RP-SMA • Certified antennas: see selection guide
PSTN network	• PSTN V90 modem • Autoadaptable all countries

LAN NETWORK

Ethernet	• RJ45, 1 up to 4 ports depending on model • Auto: 10/100 full & half MDI/MDI-X
RS232/RS485	• 9600 up to 115200bps 10 or 11 bits • RAW TCP server, TCP client & UDP gateway • ModBus master or slave gateway • Unitelway gateway for master PLC • RS232 : RJ45 • RS485: 2 points phoenix connector
Wi-Fi	Access point 2.4 and 5 GHz depending on model

ROUTING / IP@ / MANAGEMENT

Routing IP	• Routing tables • Static routes • RIP or OSPF • Address translation (DNAT et NAT 1:1)
Assigning IP@	• WAN interface: DHCP client or fixed IP • LAN interface: DHCP server
DNS	• WAN interface: compatible with DYNDNS, No-IP or ETIC DNS • LAN interface: relay & DNS server
Management	MIB 2 andTraps SNMP
Configuration	Web Server

SECURITY

VPN tunnel	• OpenVPN (TLS/SSL), IPSEC, L2TP/IPSEC, PPTP • Shared Key or X.509 Certificate • Encryption 3DES & AES 128-192-256 • Authentication: MD5 & SHA-1 • Up to 10 VPN tunnels (mix OpenVPN and IPSEC allowed)
Firewall	• Stateful packet inspection (SPI : 50 rules) • Filtering IP@ and Ports
Internal report	• Timestamped • Events: connection, restart, alarms
Alarms	• Digital input: email, SMS, SNMP trap • Digital output: Power supply failure, user connection, ...
Redundancy	VRRP protocol RFC 3768

M2ME SOLUTION

Users	Up to 100 remote users
Security	• Access to the RAS by Login & Password and optional certificate • Single RAS product key required for the remote user • Customizable LAN machine network access rights
Alarms	RAS Compatible with «Alert & Display» solution
Redundancy	Multi WAN for backup on specific models
Communication	• Secured Connection onto the M2Me_Connect service • OpenVPN
Management	• Saving a configuration • Recording on USB flash drive, SD card or internal memory • Reset product to return to factory configuration • Option managed from the client area of the WEB site
M2Me Client	• PC: All OS versions up to W10 • Smartphone and tablet PC: Android and iOS
M2Me_Connect	VPN Tunnel Secure Interconnection Service

Since 1985, Etic Telecom designs and markets industrial telecom solutions to interconnect machines with each other.

Etic Telecom is dedicated to the supply of safe, simple and sustainable products (3S).

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INDUSTRIAL NETWORKING