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TEMS™ MONITOR MASTER
STANDARD PACKAGES

TEMS Monitor Master Standard Packages provide everything you need – from hardware, software, tests, reports, and support – to implement an end-to-end monitoring solution that keeps your services earning revenue.

Subscribers expect their mobile services to work reliably and quickly 24 hours a day, 7 days a week, 365 days a year. If they don't get service, not only does revenue suffer, there is a risk that they will churn to a better network. As the Internet brings service convergence, smartphones accelerate device convergence, and LTE brings network convergence, advanced data and messaging services will increasingly become the norm.

Carriers need to measure how these services are being delivered from the user's perspective. When something goes wrong, they need to know quickly and precisely so resources can be prioritized and marshalled to fix the problem.

TEMS Monitor Master is Ascom Network Testing's carrier-grade software and hardware solution with all the advanced capabilities required to test services from the user perspective. It is in use throughout the world delivering value to many customers. For the benefit of new customers, these capabilities have been packaged into standard packages that contain everything required to implement a solution. This will help customers get visibility of service availability very quickly and forms the basis for more advanced testing as customer needs grow. Time to value is measured in days.

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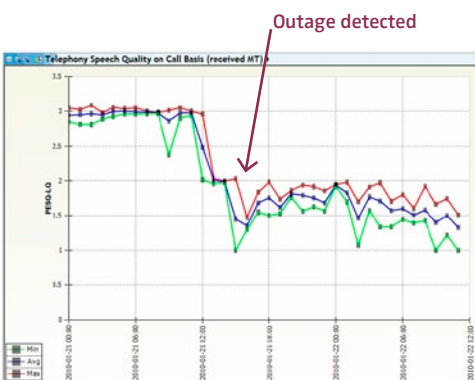## STANDARD PACKAGES ARE AVAILABLE FOR:

- Voice – availability and quality
- IP and data – Web, video streaming, FTP, Ping, DNS, WSP, network attach timings
- Messaging – SMS, MMS, e-mail, Visual Voice Mail for iPhone

These conform to ETSI specifications and deliver key performance indicators (KPIs) about these services. Each package implements radio trace diagnostic capture to give the ultimate in detail to help troubleshoot issues if they arise. Customers can buy multiple packages and add new ones as needed. A central package is also available from which reports are generated.

Each package contains everything required to implement a system including:

- **Hardware** – each service package contains 2 hardware probes each containing 2 modems; the central package contains a server
- **Software** – all TEMS Monitor Master software is included with standard test scripts for each service
- **Reports** – all standard reports are provided to show the KPIs reported by the tests
- **Licenses** – all licenses are provided
- **Professional services** – all professional service time to install, implement, and test the system at the customer site is provided
- **Documentation** – TEMS Monitor Master comes with extensive offline and online documentation
- **Support** – support is included for both hardware and software
- **Maintenance** – software maintenance and updates are included
- **Warranty** – warranty for hardware items is included for the first year and can be extended for subsequent years

Customers can add further optional packages to exploit central SIM multiplexing capabilities, or they can employ the full power of the platform to test services that haven't been implemented yet.

Outage detected

Test	Type	2010-01-21 15:00:00	2010-01-21 14:00:00	2010-01-21 13:00:00	2010-01-21 12:00:00	2010-01-21 11:00:00	2010-01-21 10:00:00	2010-01-21 09:00:00	2010-01-21 08:00:00	Average of Values
QM Voice Quality	Network Non-Accessibility (ETSI) MO	0	0	0	0	0	0	0	0	0
	Network Non-Accessibility (ETSI) MT	0	0	0	0	0	0	0	0	0
	Telephony Service Non-Accessibility (ETSI)	0	0	40	0	0	0	0	0	5
	Telephony Setup Time (ETSI)	8.56	7.67	7.71	7.15	6.36	6.75	6.9	6.37	7.19
	Telephony Cut-off Call Ratio (ETSI)	0	0	0	0	0	0	0	0	0
	Telephony Call Duration Time (non-ETSI)	17.92	17.88	18.01	18.04	17.95	17.8	17.83	17.87	17.91
	Telephony Speech Quality on Call Basis (received MT) (ETSI)	1.45	1.99	2	2.49	2.97	2.97	2.86	2.98	2.46

ETSI KPI Overview (Average)

Time (hour)

Outages detected

"Whatever your testing need, if a user can do it, TEMS Monitor Master can test it"

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