

NTELS IoT Platform

N-MAS

CONNECTIVITY

INNOVATIVE PLATFORMS FOR BUSINESS INTELLIGENCE

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Creative
Convergence 
ntels

Industry Standard IoT Platform, N-MAS Connectivity

As a globally certified platform for interoperability test, N-MAS Connectivity becomes a standard among domestic IoT platforms, providing common functions used in various verticals.

N-MAS Connectivity solves issues in both development and business areas so you can secure IoT business value. It includes oneM2M Common Service Functions and supports various external interfaces, which enables you to employ the platform in a wide variety of applications.



KEY FUNCTIONS

Comprehensive Monitoring & Control

- Device registration, control, management and monitoring
- Application and container group management
- Device location management and condition-based resource search
- Real-time device data display in widget and graph
- Sharing of data from services registered with the platform

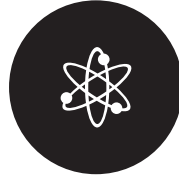
Support for Stable Operation

- Extended APIs for software and firmware upgrade
- Service dashboard with widgets and portal
- Prevention of data loss using database skip mode
- Traffic control by blocking devices that cause abnormal traffic based on the IP address of the devices
- Rule-based event generation and push using data collected



Efficient Cost Savings

No overlapping development using common functions, which helps reduce costs and time-to-market, without going through all the phases from analysis, design, development to verification



Excellent Interoperability

Support for various protocols and interfaces, which makes it easy to flexibly interface with third-party devices, platforms and services



Sustainable Service Operation

Easy to create value-added services by using excellent interoperability with the common platform and to extend services, responding to the needs of customers and market changes

USE CASES



MNO Business

- Switched from network-based service to platform-based service
- Provided from basic communication service to remote device control and firmware update
- Interfaced with a mobile network operator's systems, such as SMS, LBS and billing system



TTA Interoperability Tester

- Used N-MAS Platform as a reference device (tester) for oneM2M interoperability test and validation to evaluate interoperability between two systems that use the same protocol



Smart City

- Addressed energy shortage, traffic congestion, environmental pollution and public safety through Smart Parking, Smart Energy, Smart Safety, Smart Lighting services
- Built a global smart city by connecting cities to each other



Convergence of ICT and Industry 4.0

- Converged ICT and shipbuilding and marine technology to increase the competitiveness of the shipbuilding & marine industry and improve productivity



eIoT & Electricity Software Development Platform

- Implemented an open platform by replacing the existing closed power information system
- Fostered new energy businesses with the ICT-based energy platform by securing electricity infrastructure



Cellular IoT (3GPP)

- Provided network control function depending on the characteristics of network (network-as-a-service) in addition to traditional voice and data services
- Provided oneM2M-compliant SCS functions to help MNO enable NB-IoT service

CUSTOMERS





TTA Verified
TTA-V-N-16-052



oneM2M Standards Certified by TTA
TTA-C-N1-17-007

PRODUCT LINES

● Included ▲ Option - Not Included

	Management			High Availability		SDK		Support		
	¹ EMS	² Multi-OAM	³ Portal	⁴ Platform	⁵ DB	⁶ Sample & Manual	⁷ Library	Consulting	Test	Maintenance
Edge	●	-	-	-	-	▲	▲	▲	▲	▲
Express	●	-	-	-	-	▲	▲	▲	▲	▲
Standard	●	●	-	●	●	▲	▲	▲	▲	▲
Enterprise	●	●	●	●	●	●	▲	▲	▲	▲
S/W Package	●	▲	▲	-	-	●	▲	▲	▲	▲
Cloud (TBA)	▲	▲	▲	-	-	▲	▲	▲	▲	▲

- ¹ Basic Platform Management Function (Stand-alone EMS)
- ² Extended Platform Management Function (Multi-management EMS)
- ³ Portal Function (Device, Application, User and Service Management)
- ⁴ Platform High Availability Function
- ⁵ Database High Availability Function
- ⁶ Manual and Sample Program for Interfacing with Platform
- ⁷ Library for Interfacing with Platform

TECHNICAL SPECIFICATIONS

	Edge	Express	Standard	Enterprise
Processor	Intel® Celeron® 4core SoC	Intel Xeon 3.6GHz 4core *1	Intel Xeon 3.6GHz 4core *1	Intel Xeon 2.4GHz 10core *2
Memory	8G	64G	64G	128G
Disk	500G SATA III	1TB SATA III	1TB SATA III	1TB SATA III (RAID) * 4ea
	SATADOM 8G	SATADOM 16G	SATADOM 16G	SATADOM 16G
NIC	RJ45 – 2xGbe	RJ45 – 4xGbe (2 Pairs of LAN Bypass)	RJ45 – 4xGbe (2 Pairs of LAN Bypass)	RJ45 – 4xGbe (2 Pairs of LAN Bypass)
Power	ATX	300W Single	300W Redundant	860W Redundant
Display	-	Power, HDD, Status	Power, HDD, Status	Power, HDD, Status
	-	LCD(2x16 characters)	LCD(2x16 characters)	LCD(2x16 characters)
Peripheral	1x USB 3.0 / 3x USB 2.0	2x USB 3.0 ports	2x USB 3.0 ports	2x USB 3.0 ports
	4x RS-232 / 422 / 485	1x Console Port (RJ45 type)	1x Console Port (RJ45 type)	1x Console Port (RJ45 type)
	1x VGA / 1xHDMI	1x internal VGA port	1x internal VGA port	1x internal VGA port
Transaction Capacity (1 Day, Data Size 1k)	~ 10,000k	10,000k ~ 50,000k	50,000k ~ 100,000K	100,000k ~ 200,000k+