

## Unlocking the Power of G3 Technology in Worldwide AMI Deployments



## Eastsoft.

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### **Eastsoft** Eastsoft and G3-Alliance

- Eastsoft joined the G3-Alliance in 2015. Actively participated in the research and development of G3 products.
- Eastsoft has been launching communication solutions based on G3-PLC since 2013,

supporting G3 standards and expanding its own protocols

## **G3-Alliance**



#### **Eastsoft** G3 Hybrid Solutions





# 02 AMI Deployments

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Global Sales of G3 Chips & Modules **7,000,000** 



Africa 1,600,000+



Saudi Arabia **2,000,000** 

**Eastsoft** Global Market

Indonesia 55,000

Uzbekistan **3,200,000+** 

C.::::

Thailand **50,000** 

Kyrgyzstan 80,000 Bulgaria 90,000

#### **Eastsoft** Application of Eastsoft G3 Hybrid Solutions - Saudi Arabia





- 2 million G3 Hybrid communication module
- Meter reading across transformer areas
- The success rate is 1.5% higher than the NB solution in the same period.

#### **Eastsoft** Application of Eastsoft G3 Hybrid Solutions - Indonesia



- G3 Hybrid
- Success rate 98%

Meter Connectivity Bar Line				Ber Line				Data Collections				
Tanggal	Total Meter	Meter Online	DCU	Ratio (%)	Tanggal	Meter Success - Meter F	DCU	Ratio (%)	Tanggal	Meter Data Collected	DCU	Ratio (%)
21-September-2022	51.650	50.471	459	97.72	21-September-2022	48.445	459	93.79	21-September-2022	4.790.241	459	96.61
22-September-2022	51.648	50.692	459	98.15	22-September-2022	49.284	459	95.42	22-September-2022	4.830.788	459	97.43
23-September-2022	51.644	50.635	459	98.05	23-September-2022	48.401	459	93.72	23-September-2022	4.807.232	459	96.96
24-September-2022	51.639	50.579	459	97.95	24-September-2022	48.830	458	94.56	24-September-2022	4.813.661	459	97.1
25-September-2022	51.639	50.524	459	97.84	25-September-2022	48.653	459	94.22	25-September-2022	4.806.867	459	96.96
26-September-2022	51.637	50.658	459	98.1	26-September-2022	48.894	458	94.69	26-September-2022	4.821.847	459	97.27
27-September-2022	51.606	50.669	459	98.18	27-September-2022	49.174	459	95.29	27-September-2022	4.826.241	459	97.42
28-September-2022	51.595	50.726	459	98.32	28-September-2022	49.425	459	95.79	28-September-2022	4.836.371	459	97.64
29-September-2022	51.575	49.434	459	95.85	29-September-2022	0	0	0	29-September-2022	1.479.489	459	29.88
30-September-2022	0	0	0	0	30-September-2022	0	0	0	30-September-2022	0	0	0
21-30 of 30 items				< 1 2 3 >	21-30 of 30 items			< 1 2 3 >	21-30 of 30 items			< 1 2 3 >

#### **Eastsoft** Application of Eastsoft G3 Hybrid Solutions - Uzbekistan



- More than 3.2 million G3-PLC modules;
- Always ranked first in all KPIs;
- Excellent on-site communication performance;
- Highly praised by local electricity company.





#### **Eastsoft Application of Eastsoft G3 Hybrid Solutions**



Success rate 97%; •

Success rate 99%;

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G3 Hybrid solution was adopted as a technical standard in the bidding process. ٠

About 100,000 meters per year;

- **Bulgaria**



- 1.6 million modules for prepaid electricity meters and CIUs; ٠
- Continuously supplying; ٠

#### Africa

#### **Eastsoft** Complete Ecological Chain

• Modules for single & three • Data Concentrator Unit(DCU); phase meter; • Protocol Converter; • Modules for DCU, data • Medium Voltage PLC machine; collector; System Peripheral Deepen Chips Modules & Applications **Applications** Teminals Automatic transformer area identification; Asset Discovery; • Phase Identification; • Last Gasp; • G3 Hybrid network management;

#### **Eastsoft** Deepen Application Based on G3 Technology



#### **Eastsoft** Automatic Transformer Area Identification & Asset Discovery





- Disordered on-site wiring;
- Lack of standardized management of transformer-meter archives;
- Requirement for line loss culculations;



- Create a clear meter profile for the transformer area;
- Achieve precise identification of workbench areas in diverse G3 hybrid networks;
- Facilitate line loss calculations;





#### **Eastsoft** Company Development History

Development Action Plan".



#### **Eastsoft** Company Development History

Eastsoft is a company dedicated to integrated communication technology research and development.

With chip design as our foundation and smart manufacturing as our core, we focus on three sectors: integrated circuits, new energy, and digitalization. Our goal is to establish a complete industry chain encompassing "chips, software, modules, terminals, systems, and information services."



### **Eastsoft** Focus On Communication For 27 Years

<b>+</b>	1996	2004	2013	2015	2017	2019	2022	
Start PLC research		2nd Generation PLC system	<ul> <li>5th Generation PLC system:</li> <li>SSC1650: China first narrowband high-speed F product based on OFDM<sup>[</sup></li> <li>SSC1643: The first international PLC product supports both BFSK<sup>[2]</sup> &amp; E modulation methods.</li> </ul>	Broadband Low-Speed:         SSC1663/1664:         • Comply with State Grid         broadband communication         protocol         t that         Hybrid Solution:         SSC1650+RFT5361         • China first PLC + RF         communication scheme	<ul> <li>Broadband Low-Speed: SSC1667</li> <li>Comply with State Grid Broadband PLC agreement</li> <li>Bandwidth: 780kHz - 12MHz</li> <li>Comm. Speed: 100k - 5Mbps</li> </ul>	Micro power wireless transceiver RFT5362 • Support 2GFSK, 4GFSK modulation. BLE 5.0	<ul> <li>HPLC Hybrid Solution: SSC6763</li> <li>Comply with State Grid HPLC</li> <li>Hybrid Standard</li> <li>Broadband Low Speed: SSC1670</li> <li>Applied in PLC IoT industry, such as intelligent lighting systems, intelligent building systems, etc.</li> <li>Comply with IEEE 1901.1</li> </ul>	
	<b>1st</b> Generation PLC system	3rd Generation PLC system: <b>SSC1630</b>	<b>4rd</b> Generation PLC system: <b>SSC1641</b>	<ul> <li>6th Generation PLC system:</li> <li>SSC1660: China first broadband power line high- speed communication product</li> <li>SSC1645: 1st Generation micro power wireless system.</li> </ul>	<ul> <li>Broadband Low-Speed: SSC1663E</li> <li>Comply with South China Grid broadband PLC standards</li> <li>Bluetooth: BLE4.2</li> <li>China first Bluetooth low power chip for Mesh</li> </ul>	<ul> <li>SSC1655</li> <li>Compatible with 3rd, 4th and 5th generation system.</li> <li>Supports single carrier BFSK, DBPSK<sup>[4]</sup>, and multi-carrier OFDM modulation methods.</li> </ul>	SSC1657 • Support G3-PLC complete set of protocols, DBPSK/BPSK and multi-carrier OFDM modulation methods.	
	2000	2008	2011	2014	2016	2018	2021	

400 Million Pcs Accumulated Sales of Communication Chips **100 Million** Pcs Eastsoft Chips Running In the Power Grid

#### **Eastsoft**. Future Potential and Prospects

#### **1. Deepen Applcations:**

- Automatic transformer area identification
- Asset discovery

2. A separate G3 RF certification program

#### Eastsoft.

Adhering to the concept of win-win cooperation, we provide high-quality and efficient AMI systems and services for power companies

## THANK YOU

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