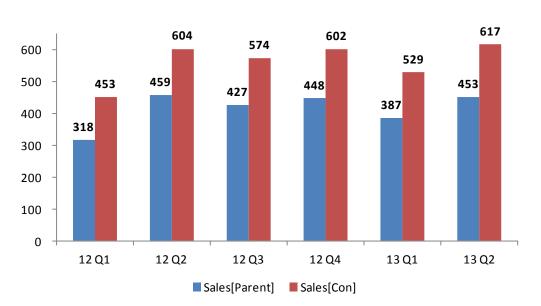


Q2 2013 results

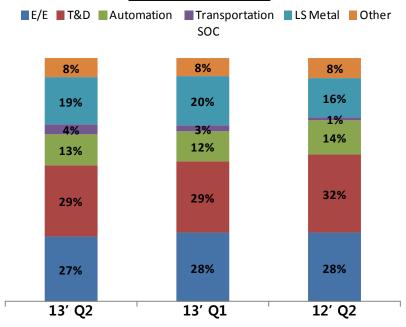


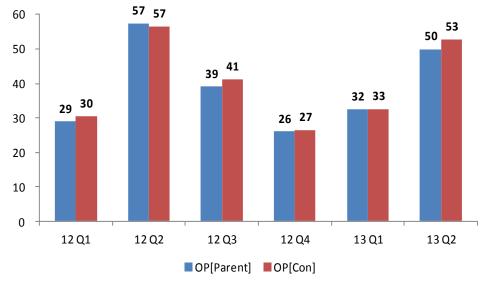
Q2'13 Results

				change		
Won(Bil)	Q2 2013	Q1 2013	Q2 2012	Y-o-Y	Q-o-Q	
Sales	617	529	604	2.2% ↑	16.6% ↑	
COGS	501	436	484	3.6% ↑	15.1% ↑	
GP	116	94	120	-3.3% ↓	23.8% ↑	
S&A Exp	63	61	61	2.9% ↑	3.4% ↑	
OP	53	33	56	-6.4% ↓	61.7% ↑	
EBT	28	14	46	-39.3% ↓	100.0% ↑	
Net Income	23	13	32	-28.0% ↓	80.3% ↑	



Divisional Sales

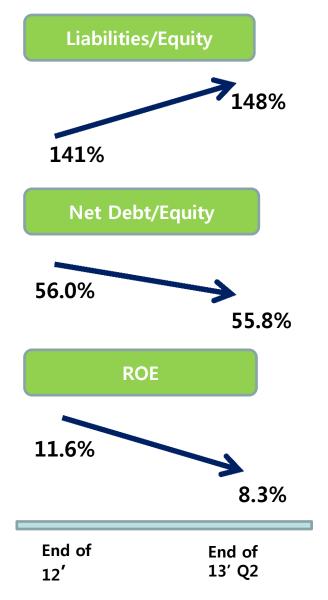






Balance Sheet

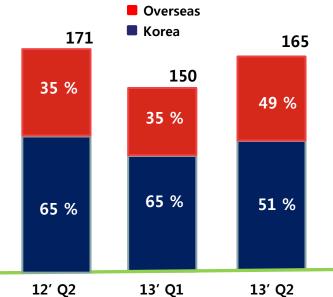
Won(Bil)	13' Q2	2012	2011	Y-o-Y	(%)
Asset	2,118	2,020	1,770	98	4.9%
Current	1,263	1,157	920	106	9.2%
Cash & Cash Equi	203	176	125	27	15.3%
Non-Current	855	863	848	-8	-0.9%
Liability	1,267	1,183	993	84	7.1%
Current	625	604	514	21	3.5%
Non-Current	642	579	479	63	10.9%
Equity	851	839	777	12	1.4%
Net Debt	475	470	451	5	1.1%





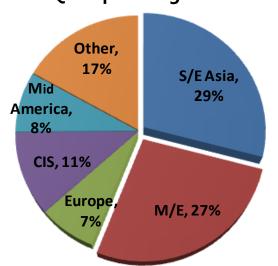
Electric Equipment – Q2 Results & Market Outlook

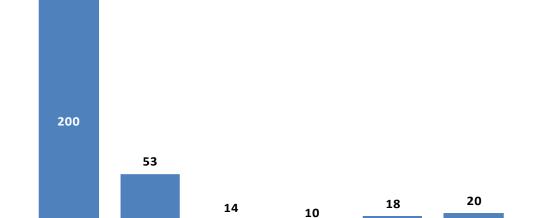
Sales(bil)



- · Remained solid sales & operating profits despite of sluggish macro
- Maintained strong market dominance in Korea & exports portion increased to nearly 50% of total sales
- [Domestic]
 Sales ↓ (Y-o-Y) due to sales deferral of Gov't PJTs & recession in shipment industry
- [Overseas]
 Sales ↑ (Y-o-Y) due to sales growth to emerging market
- 2nd Half → Focusing on Local Mega PJTs(SSE, Hynix, Lotte, Kepco, Misc)
- Overall environment favorable as Macro Index expected to improve (CAPEX $\triangle 1.9\% \rightarrow +1.7\%$, Construction $\triangle 2.2 \rightarrow +4.2\%$) in 2nd Half

13' Q2 Export Region





Meter

Relays

Swich



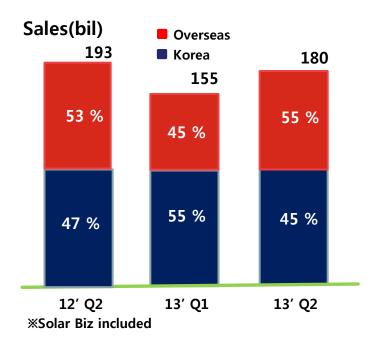
Other

HV

LV

Products(bil)

T & D – Q2 Results & Market Outlook

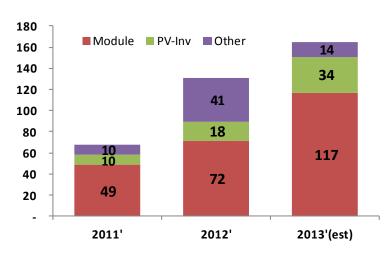


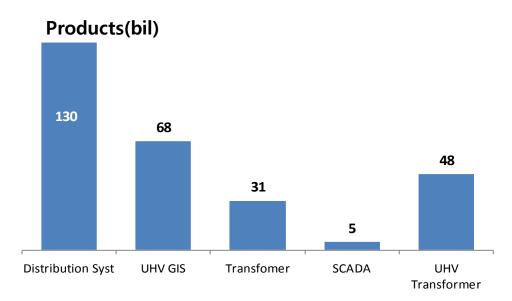
- Remained robust sales of Iraq substation PJT & PV-products to Japan
- Maintained strong Sales Growth on Q-o-Q base due to seasonality
- Sales ↓ (Y-o-Y) due to base effect of one-off PJT in Bulgaria(₩30b) in 12 Q2
- [Domestic]

Sales \(\psi(Y-o-Y)\) due to Market recession & Results of fortifying Risk MGT towards Local Construction Companies

- [Overseas]
 Strong performance at overseas biz(Iraq, Japan solar)
- 2nd Half
 - Focusing rewarding Ongoing Bids in MENA region with Iraq Ref.
 - Fortifying Feasible Local PJTs in UHV Market(IIAT₩10b, KEPCO S/S ₩10b)
 - Solar sales expected to meet target of '13 largely driven by exports to Japan
 - Preparing 'After Iraq' Market(Saudi, Africa, US) with internalization of Iraq PJT

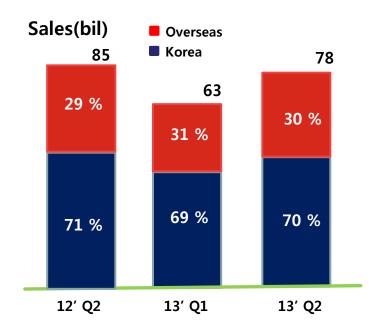
Solar Biz Sales Outlook







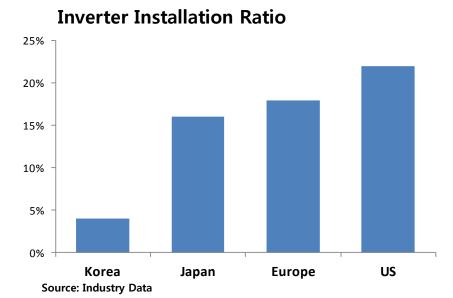
Automation – Q2 Results & Market Outlook

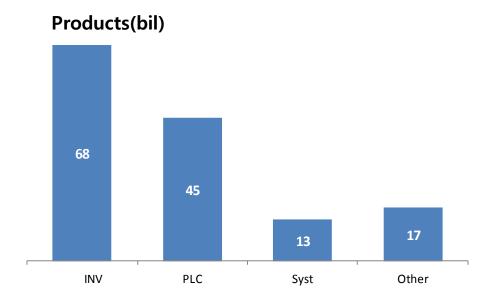


- Sales(Q-o-Q) rebounded driven by seasonality
- Remained Leading position in Local Device Market & Secured normal Sales Pace
- Automation System(Order base) sales slowdown due to weak back log
- [Domestic]

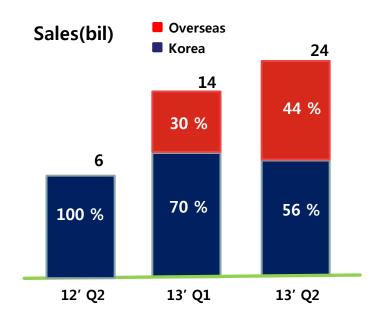
Sales ↓ (Y-o-Y) due to Slow-paced Macro, downturn in Capex

- [Overseas]
 Sales Growth at Slow progress due to delaying in finding Key Accounts
- 2nd Half
 - Focusing on Energy Saving Market(Power Shortage Issues in Korea)
 - System Sales expected to rebound in 2nd Half as Back log recovering
 - Expecting high growth in next 5 years as chronic power shortage issue





Transportation SOC - Q2 Results & Market Outlook



- Strong Sales growth driven by Sales recognition of KTX PJT & Bangladesh PJT
- Expected Sales of 13' ₩120b largely driven by two PJTs

PJT	Plan	Sales	%
ктх	65	13	20%
Bangladesh	23	14	62%

- * KTX: Korea Train eXpress
- New Orders Rewarded from Taiwan PJT(₩10b)
- 2nd Half
 - Focusing on New orders IIAT(₩20b)
 - New KTX PJT (Suseo-Pyungtaek)expected to place order(₩80b)

Order Backlog

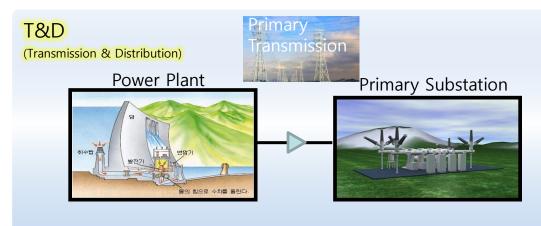
DIV		12'Q2	12' Q4	13' Q2
T & D	Korea	317	271	287
	Overseas	345	332	278
T 000	Korea	191	317	316
Trans SOC	Overseas	35	7	31
Other	-	110	160	178
Total		998	1,087	1,090





Business portfolio

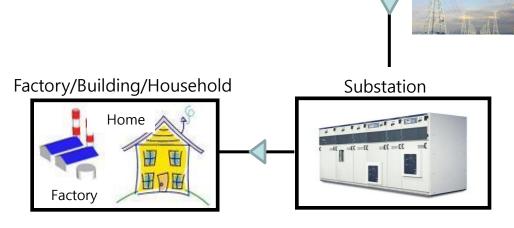
Leading Electric Power, Automation & Green Business Total Solution Provider



Ultra-high voltage power transmission & distribution system equipment like gas insulated switchgear (GIS) and gas circuit breakers (GCB)

<Main Product>

- Gas Insulated Switchgear (GIS)
- Transformer
- Remote Monitoring & Diagnosis Equipment
- Power Distribution Panels & Switchgears
- Railway System



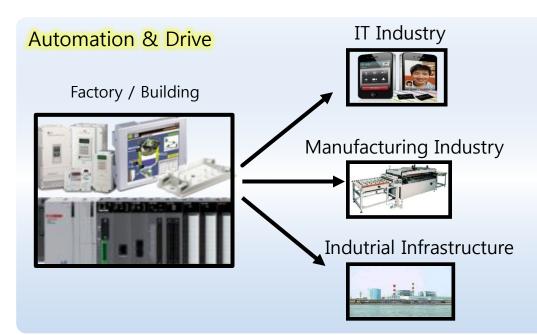
Top low and medium voltage Electric equipment for electricity users

- <Main Products>
- Vacuum Circuit Breaker
- Air Circuit Breaker
- Molded Case Circuit Breaker (MCCB)
- Contactors



Sub-Transmission

Business portfolio



Automation systems, which integrate core hardware and software technologies as well as technological services, provide optimum total solutions in a wide range of industrial workplaces

- <Main Product>
- Inverter (Motor Drive)
- PLC (Programmable Logic Controller)
- HMI (Human Machine Interface)
- Automation System (Distributed Control System)
- Power Semiconductor









Smart Grid

Photovoltaic System

Industrial IT

HVDC System

Green Car Solution



Products portfolio – Electric Equipment

Electric Equipment















- Low voltage
 - Air Circuit Breakers(ACB)
 - Molded Case Circuit Breakers (MCCB)
 - Miniature Circuit Breakers (MCB)
 - Magnetic Contactors (MC)
 - Electronic Motor Protection Relay(EMPR)
- High Voltage
 - Ring Main Unit(RMU), Load Break Switch(LBS)
 - Vacuum Circuit Breakers (VCB)
 - Vacuum Interrupter(VI)
 - Power Fuses
- ❖ Measurement / Relay
 - Smart Meter, Electronic Watt-Hour Meter
 - Digital Protection Relay & Meter

RMU, LBS **VCB ACB MCCB MCB** MC & TOR **MMS**

- 12/17.5/24kV
- 630A
- 21kA (3s)
- IEC62271-1~200
- AC 7.2~40.5kV
- Up to 4,000A
- Up to 50kA
- IEC 62271-100
- AC 690V
- Up to
- 6,300A
- Up to 150kA
- IEC 60947-2
- AC 690V
 - Up to 1600A
 - Up to 150kA
 - IEC 60947-2
- AC 400V
- Up to 125A
- Up to 10kA
- IEC 60898
- AC 690V
- Up to 800A
- UL 508

- IEC 60947-4
- AC 690V
- Up to 100A
- Up to 100kA
- UL 508
- IEC 60947-2/4



Products portfolio –T & D



- Ultra High Voltage Equipment
 - Gas Insulated Switchgear
 - Gas Circuit Breaker
- Transformer
 - Mold Transformer
 - Cast Resin Transformer
 - Oil Immersed Transformer
- Power Distribution Panel
 - Gas Insulated Switchgear
 - Air Insulated Switchgear
 - Motor Control Center
- Diagnostic Equipment
 - Diagnosis & Overhaul,
 - Power Monitoring System, Rationalization
 - Power Quality Monitoring Solution
- Busway
 - Susol Busway, GH-P Type

Gas Insulated Switchgear



- 362kV • Up to
- 8,000A
- Up to 63kA
- 245kV
- Up to 4,000A
- Up to 50kA
- 72.5~170kV
- Up to
- 4,000A • Up to 50kA



- 72~550kV
- Up to 800MVA
- IEC 60076 / ANSI(IEEE) C57



Transformer



- 3.3~36kV
- Up to
 - 20MVA



• 7.2~36kV

• 630~3150A

• up to 170kV

• IEC 62271-200

KERI & KEMA

Certified

Switchgear/Busway



- 600V
- 630 ~5000A
- 80 kA / 1s
- ASTA
- Certified
- Up to 1000 V
- 630~6000A (AI)
- 630~7500A (Cu)
- 220 kA / 1 s (Cu 4000A)



Products portfolio –Automation

Automation & Drive















- PLC (Programmable Logic Controller)
- HMI (Human Machine Interface)
- ❖ Servo Motor/Drive
- * AC Drive
- MV Drive
- Power Semiconductor

Drive Solution Automation Solution Power Semiconductor AC Drive PSC module MV Drive PLC HMI Servo

- 200/400V 0.1~800kW 2/4/6/10kV
- V/F, Sensorless, Vector Control
- Energy Saving
- 200~11,000kvA V/F, Sensorless, Vector Control
- Energy Saving
- Redundancy & Performance
- Distributed I/O
- Ladder & IEC Language
- 5~15" Touch Screen
- 65,536 Colors
- Offline Program Simulation
- Standard EtherCAT
- Network
 - Accurate Control
 - Full-Closed
 - Ethernet / Serial Communication

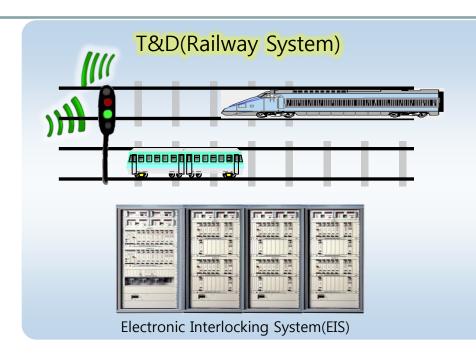




- IGBT Module
- MOSFET Module
- Diode Module



Products portfolio –Trans. SOC



- ❖ AF Track Circuit
 - Analog Audio Frequency Track Circuit
 - Digital Audio Frequency Track Circuit
- CTC
 - Centralised Traffic Control(CTC)
- Traction Power System
 - Scott Transformer, DC Switchgear & DC Rectifier, GIS
- Signalling System
 - Communication Based Train Control(CBTC)
 - Electronic Interlocking System(EIS)
 - Automatic Train Protection(ATP)
- * ATC
 - Automatic Train Control System(ATC)
 - Automatic Train Operation(ATO)

AF Track Circuit

CTC

Traction Power System

Signalling System

ATC





 Digital Audio Frequency Track Circuit



Centralised Traffic Control



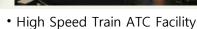
 Scott Transformer (154kV/55kV)

- DC Switchgear
- DC Rectifier(1,500V / 750V)
- High Voltage Transformer (154kV/22.9kV)
- GIS (170kV, 72.5kV)
- Low Voltage Switchgear



• CBTC System

- FIS
- ATP



- Korail maintenance train ATC
- High speed mainline signaling system
- ATC Ground Control System
- ATC Ground Control S/W
- ATC/ATO Train Control S/W



