SANDS

LINUX HAND HELD COMPUTER
OPAL

OPAL is a handheld computer used to download data from electronic tri-vector meters, supporting different protocols like IEC, ANSI and PACT. OPAL can be interfaced with the portable printer for spot billing applications.

OPAL comes with Linux Operating System. OPAL is available in memory sizes ranging from 512MB (Optional 16GB/32GB)*

ACCESSORIES
◊ Optical Probes
◊ USB Cable (Type 2.0)
◊ AC adapter
◊ Communication cable
◊ Carrying case

IMPACT PRINTER (OPTIONAL)*
◊ 2 Inch paper width
◊ High speed printing
◊ Long ribbon life
◊ RS 232/Bluetooth Interface

FEATURES

◊ Electronic Reports for Static Tri-vector Meter data

◊ No manual interventions and Error free reports

◊ Universal report generation irrespective of meter make

◊ Reports effecting activities like energy accounting, technical loss calculations & deriving industry load patterns

◊ HT service meter reports in comparison to the respective feeder Meter data

◊ Consolidated consumer reports for quick reference of higher level management

◊ High Speed (HS) communication

◊ Complied with Common DLMS S/W

PROCESSOR

ATMEL ARM CORTEX – A5 (SAMA5D36)

CONTROL UNIT

Operating System	Linux Kernel 4.4
Memory	RAM (DDR2)- 256MB
	NAND Flash – 512MB
	Micro SD Card -16GB/32GB (Optional)*

DISPLAY UNIT

Display	3.5 inch, 320 X 240 resolution, TFT Display
	15 Lines X 40 Characters

KEYBOARD

Type	Sealed Membrane (Tactile)
Number of Keys	45 keys (Separate keys for Alphabets and Numbers)

COMMUNICATION

Serial	RS 232 – One Port
Ethernet	One Port (Over USB)

BATTERY

Capacity	2600/5000mAh (Optional)* with Fast Charger
	Separate pin/port for battery charging

PHYSICAL FEATURES

L x W x D	Not exceeding 250 mm x 100 mm x 60 mm
Weight	less than 1 kg
Enclosure	High Strength Moulded ABS

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Range	-10°C to 50°C
Storage Temperature Range	-25°C to 70°C
Relative Humidity	95% non condensing

PRE – LOADED APP/LIBRARIES

API's for Battery status, Memory status, Library Access for SQL
Lite, Cryptography File Transfer via RS – 232 / Ethernet

APPLICATION DEVELOPMENT

Sample Code for UART / Optional Port/ IrDA / USB / Ethernet
GCC Cross Compiler
Secure Shell (SSH) for secure communication