SMARTCOMM
EMS

Lauritz Knudsen
Electrical & Automation

Empowering You
with Energy Insights,
Anytime, Anywhere!

EMS on Cloud simplifies energy monitoring with real time data

Smartcomm EMS on Cloud empowers business owners and plant heads to seamlessly monitor energy usage & efficiency across operations and facilities. With our subscription-based software license, harness the power of cloud with minimal investment, faster deployment, seamless updates and easy scalability. Businesses owners can now track and take decisions on energy optimization based on real-time as well as historical insights, thereby reducing energy costs and increasing business efficiency.

- **Accessibility:** Accessible from anywhere, enabling remote monitoring and management
- **Cost-Effectiveness:** Lower upfront costs reducing IT maintenance expenses
- **Integration:** Integrate with IoT devices for a comprehensive energy management solution
- **Updates and Maintenance:** Automatic software updates and maintenance
- **Data Analytics:** Data Analytics at its best through widget-based dashboards and reports
- **Key Performance Indicators:** Intelligent Notifications through SMS and Email based alerts and alarms

Customer Interaction Center (CIC)
Phone no: 022-6932 7800
Web: www.LK-EA.com | e-mail: CIC@LK-EA.com

Single Function Meters [9030]

1xxx Series

› Accuracy Class 1.0, 0.5
› Input voltage measurement range 50-520 VAC (P-P)
› Aux supply 80-300 V AC / DC
› CT secondary site selectable 1A / 5A
› Flush mounting 96 x 96 mm
› Inbuilt selector switch for 3 phase meters
› CT/PT site programmable
› Frequency parameter available in 3Ph Voltmeter additionally

Description	Cat. No.	M.R.P. (₹) Per Unit
1Ph LED Ammeter Cl 1	WL1110100OOO	935
1Ph LED Voltmeter Cl 1	WL1120100OOO	935
3Ph LED Ammeter Cl 1	WL1310100OOO	1425
3Ph LED Voltmeter Cl 1	WL1320100OOO	1425
LED Freq meter Cl 0.2	WL1130400OOO	935
1Ph LED Ammeter Cl 0.5	WL1110200OOO	1255
1Ph LED Voltmeter Cl 0.5	WL1120200OOO	1255
3Ph LED Ammeter Cl 0.5	WL1310200OOO	1690
3Ph LED Voltmeter Cl 0.5	WL1320200OOO	1690

Energy Meters [9030]

4000 Series

› Accuracy Class 1.0, 0.5
› Input voltage measurement range 50-520 VAC (P-P)
› Aux supply 80-300 VAC/DC
› CT secondary site selectable 1A / 5A
› Flush mounting 96 x 96 mm
› CT/PT site programmable
› Auto scaling of Kilo, Mega and Giga
› Parameters: Site selectable kWh / kVA / PF / W, Old energy

kWh or kVAh is site selectable

Energy display in kWh in its lifetime#

Description	Cat. No.	M.R.P. (₹) Per Unit
kWh LED meter Cl 1	WL4000100OOO	3005
kWh LED meter Cl 1 with RS485	WL4000110OOO	3325
kWh LED meter Cl 0.5	WL4000200OOO	3820
kWh LED meter Cl 0.5 with RS485	WL4000210OOO	4140
kWh LCD meter Cl 1	WC4000100OOO	3405
kWh LCD meter Cl 1 with RS485	WC4000110OOO	3755
kWh LCD meter Cl 0.5	WC4000200OOO	4215
kWh LCD meter Cl 0.5 with RS485	WC4000210OOO	4535

For 415V LL and CT Primary value of 400 and below

VAF + PF Meters [9030]

4110 Series

› Accuracy Class 1.0, 0.5
› Input voltage measurement range 50-520 VAC (P-P)
› Aux supply 80-300 VAC/DC
› CT secondary site selectable 1A / 5A
› Flush mounting 96 x 96 mm
› Parameters:VLL, VLN, A, F, PF, On Hrs, RPM, Apeak

Description	Cat. No.	M.R.P. (₹) Per Unit
VAF + PF meter, Cl 1	WL411010OOOO	2390
VAF + PF meter with RS485, Cl 1	WL411011OOOO	2990
VAF + PF meter, Cl 0.5	WL411020OOOO	2745
VAF + PF meter with RS485, Cl 0.5	WL411021OOOO	3320

DIN Basic Multifunction Meters [9030]

4000 Series

› **Parameters :** Voltage, Current, kW, kWh, MD

Description	Cat. No.	M.R.P. (₹) Per Unit
Energy meter 1P 5-40A Cl 1 DIN	WD4000101OOO	2630
Energy meter RS485 module	WD400010RSOO	2630

Available till stocks lasts

Counter type Energy Meter [9030]

4030 Series

Features

› Accuracy Class 1.0
› Flush mounting 96 x 96 mm
› Available with sealing arrangement
› Parameter : kWh

Description	Cat. No.	M.R.P. (₹) Per Unit
kWh Counter type meter Cl 1 (3Ph 4W 240V 5A)*	WL4030100OOO	3705

* for availability please contact nearest branch office.

New 40x0 Series

› DIN mounting whole current operated meter
› Accuracy Class 1.0
› Inbuilt RS485 option
› **Parameters :** Voltage, Current, kW, kWh, kVA, kVAh, RPM, Load hours, Interruptions

Description	Module	Cat. No.	M.R.P. (₹) Per Unit
Single Phase - 60A	2	WD4010100OOO	2895
Three Phase - 80A	5	WD4020100OOO	6275
Single Phase - 60A (RS485)	2	WD4010110OOO	4285
Three Phase - 80A (RS485)	5	WD4020110OOO	9465

Dual Source Basic MFM [9030]

4040 Series

Features

› Accuracy Class 1.0, 0.5
› Input voltage measurement range 50-520 VAC (P-P)
› Aux supply 80-300 VAC/DC
› CT secondary site selectable 1A / 5A
› DG sensing input 230 VAC
› Flush mounting 96 X 96 mm
› CT/PT site programmable
› Discrete LED for EB and DG
› True PF or Displacement PF site selectable
› Parameters: V, A, F, PF, kW, kVA, Run hours, kWh (EB and DG), Old energy, Site selectable kWh / kVAh

kWh or kVAh is site selectable

LCD offers better readability of parameters

Description	Cat. No.	M.R.P. (₹) Per Unit
Dualsource LED meter Cl1	**WL4040100OOO**	4830
Dualsource LED meter Cl1 with RS485	**WL4040110OOO**	5685
Dualsource LED meter Cl0.5	**WL4040200OOO**	5745
Dualsource LED meter Cl0.5 with RS485	**WL4040210OOO**	6725
Dualsource LCD meter Cl1	**WC4040100OOO**	5315
Dualsource LCD meter Cl1 with RS485	**WC4040110OOO**	6185
Dualsource LCD meter Cl0.5	**WC4040200OOO**	6235
Dualsource LCD meter Cl0.5 with RS485	**WC4040210OOO**	7135

Basic Multifunction Meters [9030]

4400 Series

Features

› Accuracy Class 1.0, 0.5
› Input voltage measurement range 50-520 VAC
› Aux supply 80-300 VAC/DC
› CT secondary site selectable 1A / 5A
› Flush mounting 96 x 96 mm
› CT/PT site programmable
› True PF or Displacement PF site selectable
› V, A, F, PF, kW, kVA, Old energy, Load hours, site selectable kWh/ kVAh

LCD offers better readability of parameters

Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4400 LED meter Cl 1	**WL4400100OOO**	4740
MFM 4400 LED meter Cl 1 with RS485	**WL4400110OOO**	5470
MFM 4400 LED meter Cl 0.5 with RS485	**WL4400210OOO**	6290
MFM 4400 LED meter Cl 0.5S with RS485	**WL4400310OOO**	6355
MFM 4400 LCD meter Cl 1	**WC4400100OOO**	4990
MFM 4400 LCD meter Cl 1 with RS485	**WC4400110OOO**	5790

Basic Multifunction Meters [9030]

4405 Series

Features

› Accuracy Class 1.0, 0.5
› Input voltage measurement range 50-520 VAC
› Aux supply 80-300 VAC/DC
› CT secondary site selectable 1A / 5A
› Flush mounting 96 x 96 mm
› CT/PT site programmable
› V, A, F, PF, kW, kVA, Old energy, On and Run hours, site selectable kWh/ kVAh
› True PF or Displacement PF site selectable

All parameters of 4400 series in 3 line LED display

Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4405 LED meter Cl 1	**WL4405100OOO**	6130
MFM 4405 LED meter Cl 1 with RS485	**WL4405110OOO**	6920
MFM 4405 LED meter Cl 0.5 with RS485	**WL4405210OOO**	7955
MFM 4405 LED meter Cl 0.5S with RS485	**WL4405310OOO**	8020

Multifunction Meters [9030]

Features

› Accuracy Class 1.0, 0.5, 0.5S, 0.2, 0.2S
› Input voltage measurement range 50-520 VAC (P-P)
› Aux supply 80-300 VAC/DC
› CT secondary site selectable 1A / 5A
› Flush mounting 96 x 96 mm
› CT/PT site programmable
› 128 samples / cycle
› My favourite page in LCD multifunction meters site selectable for kWh + 2 parameters
› Dedicated buttons available for direct access to Basic, Power and Energy parameters

True and Displacement PF available

Constant Wh viewing in LCD MFM even in auto scroll mode. LCD offers better readability of parameters

4410 Series

› Parameters: V, A, F, PF, kW, kVA, kVAR, kWh, kVAh, kVARh, Runhours, On hours, Phase angle, Interrupts, THD, Events (High-Low), Neutral Current, K Factor

Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4410 LED meter Cl 1	**WL4410100OOO**	8590
MFM 4410 LED meter Cl 1 with RS485	**WL4410110OOO**	9650
MFM 4410 LED meter Cl 0.5 with RS485	**WL4410210OOO**	11100
MFM 4410 LED meter Cl 0.5S with RS485	**WL4410310OOO**	12265
MFM 4410 LED meter Cl 0.2 with RS485	**WL4410410OOO**	14600
MFM 4410 LED meter Cl 0.2S with RS485	**WL4410510OOO**	18685
MFM 4410 LCD meter Cl 1	**WC4410100OOO**	10100
MFM 4410 LCD meter Cl 1 with RS485	**WC4410110OOO**	10805
MFM 4410 LCD meter Cl 0.5 with RS485	**WC4410210OOO**	12605
MFM 4410 LCD meter Cl 0.5S with RS485	**WC4410310OOO**	13810
MFM 4410 LCD meter Cl 0.2 with RS485	**WC4410410OOO**	16210
MFM 4410 LCD meter Cl 0.2S with RS485	**WC4410510OOO**	20405

4420 Series Max Demand Indicator (without Real time clock)

Parameters
› All parameters of 4410 series
› Maximum Demand (kW & kVA)

2 Relay outputs for MD Alarm

Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4420 LED meter Cl 1	WL442010OOOO	12650
MFM 4420 LED meter Cl 1 with RS485	WL442011OOOO	13580
MFM 4420 LED meter Cl 0.5 with RS485	WL442021OOOO	14900
MFM 4420 LED meter Cl 0.5S with RS485	WL442031OOOO	16050
MFM 4420 LED meter Cl 0.2 with RS485	WL442041OOOO	18340
MFM 4420 LED meter Cl 0.2S with RS485	WL442051OOOO	22355
MFM 4420 LCD meter Cl 1	WC442010OOOO	14485
MFM 4420 LCD meter Cl 1 with RS485	WC442011OOOO	15515
MFM 4420 LCD meter Cl 0.5 with RS485	WC442021OOOO	16815
MFM 4420 LCD meter Cl 0.5S with RS485	WC442031OOOO	18010
MFM 4420 LCD meter Cl 0.2 with RS485	WC442041OOOO	20405
MFM 4420 LCD meter Cl 0.2S with RS485	WC442051OOOO	24620

For Max Demand Controller (with Real time clock) please refer 6000 series

4430 Series MFM for Import-Export

Parameters
› All parameters of Model 4420 series
› Bi-directional (Import-Export)

2 Relay outputs for MD Alarm

Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4430 LED meter Cl 1	WL443010OOOO	17750
MFM 4430 LED meter Cl 1 with RS485	WL443011OOOO	18515
MFM 4430 LED meter Cl 0.5 with RS485	WL443021OOOO	19645
MFM 4430 LED meter Cl 0.5S with RS485	WL443031OOOO	20735
MFM 4430 LED meter Cl 0.2 with RS485	WL443041OOOO	22925
MFM 4430 LED meter Cl 0.2S with RS485	WL443051OOOO	26745
MFM 4430 LCD meter Cl 1	WC443010OOOO	18870
MFM 4430 LCD meter Cl 1 with RS485	WC443011OOOO	19600
MFM 4430 LCD meter Cl 0.5 with RS485	WC443021OOOO	20735
MFM 4430 LCD meter Cl 0.5S with RS485	WC443031OOOO	21830
MFM 4430 LCD meter Cl 0.2 with RS485	WC443041OOOO	24010
MFM 4430 LCD meter Cl 0.2S with RS485	WC443051OOOO	27835

4440 Series

Parameters
› All parameters of 4410 series
› Maximum Demand with Real Time Clock (RTC)
› Events (high-low) with time stamp

Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4440 LED meter Cl 1 with RS485	WL444011OOOO	15070
MFM 4440 LED meter Cl 0.5 with RS485	WL444021OOOO	16940
MFM 4440 LED meter Cl 0.2 with RS485	WL444041OOOO	20715
MFM 4440 LCD meter Cl 1 with RS485	WC444011OOOO	16325
MFM 4440 LCD meter Cl 0.5 with RS485	WC444021OOOO	18200
MFM 4440 LCD meter Cl 0.2 with RS485	WC444041OOOO	21970

5000 Series

Features
› Datalog (8 MB)
› Bi-directional (Import - Export)
› 128 samples/ cycle
› Analog I/O, digital I/O variants available
› Meter with Ethernet port available

True and Displacement PF available

Parameters
› V, A, F, kW, KVA, kVAr, kWh, kVAh, kVArh, PF, Runhr, Onhr, Interupts, Phase angle, THD, Neutral current, Max Demand (with RTC) K Factor
› Bi-directional (Import-Export)
› Events (high-low) with time stamp
› Individual Harmonics upto 31st.
› My favourite page in LCD multifunction meters site selectable for kWh + 2 parameters

Constant Wh viewing in LCD MFM even in auto scroll mode. LCD offers better readability of parameters

Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 5000 LED meter Cl 1 with RS485	WL500011OOOO	34365
MFM 5000 LED meter Cl 1 with Ethernet	WL500012OOOO	39050
MFM 5000 LED meter Cl 0.5 with Ethernet	WL500022OOOO	40725
MFM 5000 LED meter Cl 0.5S with Ethernet	WL500032OOOO	41845
MFM 5000 LCD meter Cl 1 with RS485	WC500011OOOO	35495
MFM 5000 LCD meter Cl 1 with Ethernet	WC500012OOOO	40170
MFM 5000 LCD meter Cl 0.5 with RS485	WC500021OOOO	37155
MFM 5000 LCD meter Cl 0.5S with RS485	WC500031OOOO	38280
MFM 5000 LCD meter Cl 0.5 with Ethernet	WC500022OOOO	41845
MFM 5000 LCD meter Cl 0.5S with Ethernet	WC500032OOOO	42955
MFM 5000 LCD meter Cl 0.2 with RS485	WC500041OOOO	40505
MFM 5000 LCD meter Cl 0.2S with RS485	WC500051OOOO	44410
MFM 5000 LED meter Cl 1 RS485 2A/O	WL500011OBOO	37150
MFM 5000 LED meter Cl 0.5 RS485 2D/I	WL500021OOBO	38825
MFM 5000 LED meter Cl 0.5 RS485 4D/O	WL500021OOOD	39940
MFM 5000 LCD meter Cl 1 RS485 2A/O	WC500011OBOO	38275
MFM 5000 LCD meter Cl 0.5 RS485 2D/I	WC500021OOBO	39940
MFM 5000 LCD meter Cl 0.5 RS485 4D/O	WC500021OOOD	41060
MFM 5000 LCD meter Cl 1 + RS485, 1AO, 1DO	WC500011OAOA	38520

5000 series with Digital outputs are preconfigured for

I - THD% at 8% and True PF at 0.98.

Meter can be site selected for parameters and values - A THD, V THD, VA, W, under PF, under/over (VLL, A, F) with programmable trip time (1 to 180 sec) to protect the equipments from electrical abnormalities.

Parameters	Data Log Interval			
	15 Min	30 Min	45 Min	60 Min
	No. of Days			
1	10230	20460	30690	40920
2	6820	13640	20460	27280
4	4092	8184	12276	16368
9	2046	4092	6138	8184
14	1364	2728	4092	5456
29	682	1364	2046	2728

Advanced Multifunction Meters [9030]

5010 Series

Features
› 128 samples / cycle
› Running demand, max demand, prediction demand in single page window

Parameters
› V, A, F, kW, KVA, kVAr, kWh, kVAh, kVArh, PF, Runhr, Onhr, Interrupts, Phase angle, THD, Neutral current, Max Demand (with RTC)
› Bi-directional (Import-Export)
› Events (high-low) with time stamp
› Individual Harmonics upto 31st.

True and Displacement PF available

Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 5010 LED meter Cl 1	WL501010OOO	13230
MFM 5010 LED meter Cl 1 with RS485	WL501011OOO	13800
MFM 5010 LED meter Cl 0.5S	WL501030OOO	16275
MFM 5010 LED meter Cl 0.5S with RS485	WL501031OOO	17175
MFM 5010 LED meter Cl 0.2 with RS485	WL501041OOO	18980

Maximum Demand Controller [9030]

6000 Series

Features
› Accuracy Class 1.0, 0.5S
› Input voltage measurement range 50-520 VAC (P-P)
› Aux supply 80-300 VAC/DC
› CT secondary site selectable 1A / 5A
› Flush mounting 96 x 96 mm
› CT/PT site programmable
› Datalog (8MB)
› 4 relay outputs for Max. demand controller
› Time of Day (TOD) 6 slots available
› Block/sliding window site selectable
› Running demand, max demand, prediction demand in single page window
› Individual harmonics upto 31st.

8MB Datalog preconfigured for 9 parameters including kWh, Running demand and Max Demand for 15 mins interval

Parameters
› V, A, F, kW, KVA, kVAr, kWh, kVAh, kVArh, PF, Runhr, Onhr, Intr, Phase angle, THD, Events, Neutral current, Max Demand (with RTC)

True and Displacement PF available

Description	Cat. No.	M.R.P. (₹) Per Unit
MDC 6000 LED meter Cl 1 with RS485	WL600011OOO	30790
MDC 6000 LED meter Cl 0.5S with RS485	WL600031OOO	33750
MDC 6000 LCD meter Cl 1 with RS485	WC600011OOO	31970
MDC 6000 LCD meter Cl 0.5S with RS485	WC600031OOO	34935

Prepaid Metering Solutions with SmartComm EMS [9030]

› Dual source meters by default
› Class 1 accuracy as per IS 15884
› Ratings : 1P (10-60A) : 3P (10-60A, 20-80A, CT operated)
› Parameters: V, A, PF, W, VA, Wh - EB, DG
› Communication: Wired (Modbus RS485) or Wireless (LoRaWAN)
› Facility for connection or disconnection of electric supply based on the credit balance in the meter through relay
› Optional
  » In RS485 model upto 4DI for water and gas meter
  » In LoRaWAN model upto 2DI for water and gas meters
› Wireless postpaid or prepaid metering solutions for large townships on SmartComm EMS Platform available.
› With LoRaWAN technology, meters upto 1 km approx from LoRa Gateway can be monitored without Line of sight.
› Prices available on request.

SmartComm Edge [8517] **New**

Gateways and converters from the backbone of interconnected networks, and are a crucial link between our devices and cloud-based or on-premises softwares. They facilitate seamless communication, protocol translation, and data aggregation from various type of devices, enabling efficient data transmission and integration.

MQ1000
› MQTT Gateway with ethernet port
› Easy integration with SmartComm EMS Cloud
› Compact & Secure
› Data storage in case of network failure

Description	Cat. No.	M.R.P. (₹) Per Unit
MQTT Gateway with Ethernet port	MQ1000OOO	36000

TG1000
› Modbus RS485 to MODBUS TCP/IP Gateway
› Easy integration with SmartComm EMS/PMS On-prem or 3rd party Software/HMI

Description	Cat. No.	M.R.P. (₹) Per Unit
MODBUS RTU to TCP/IP Gateway	TG1000OOO	20000