

# Beyond The Horizon

Digital Expertise

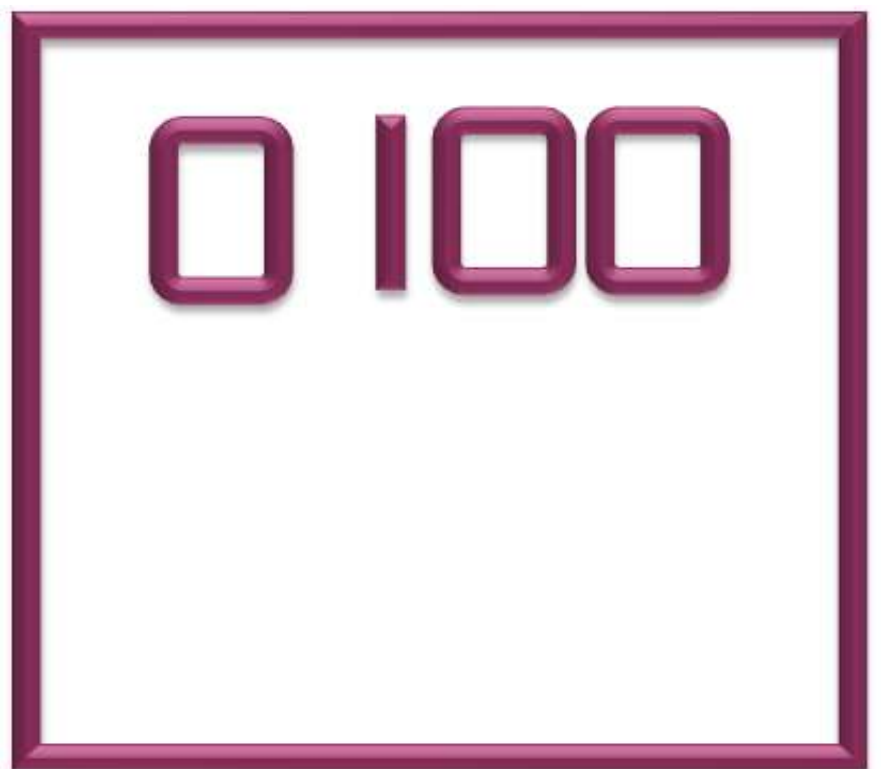


**Rishabh Instruments Pvt. Ltd.**

Price List w.e.f January 2022

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# Digital Panel Meters



Model	KMAT	Size (H x W x D)	Description	Auxiliary Supply	LP (INR)
<b>Programmable AC Ammeter</b>					
RISH EINE I	EP99	48 x 96 x 68 mm	Input : 1A /5A (Programmable) Display : 14 mm LED Display 1 Phase Network Accuracy Class : 1.0 4 Digit		820
		96 x 96 x 40 mm	Input 1A /5A (Programmable) Display : 14 mm LED Display 3Ph 3W/4W Network Accuracy Class : 1.0 4 Digit	40...300V AC/DC or 20...40V AC / 20...60V DC	1,365
		48 x 96 x 68 mm	Input : 100mA (Primary - 63 / 125 / 250A programmable) Display : 14 mm LED Display 3Ph 3W/4W Network Accuracy Class : 0.5 4 Digit		1,505
<b>Programmable AC Voltmeter</b>					
RISH EINE V	EP99	48 x 96 x 68 mm	Input : 57.5 -300 V L-N (Programmable) & 600V LN (Fixed) Display : 14 mm LED Display 1 Phase Network Accuracy Class : 1.0 4 Digit		820
		96 x 96 x 40 mm	Input : 100- 500 V L-L (Programmable) Display : 14 mm LED Display 3Ph 3W/4W Network Accuracy Class : 1.0 4 Digit	40...300V AC/DC or 20...40V AC / 20...60V DC	1,365
<b>Non- Programmable AC Ammeter</b>					
RISH ACI	DA14	72 x 144 x 94 mm	Input : 1 / 5A (To be specified while ordering only) Display : 26 mm LED Display Single Phase Network Accuracy Class : 1 4 1/2 Digit	110 / 230V AC	3,860
				24 / 110 / 220V DC	4,880
<b>Non- Programmable AC Voltmeter</b>					
RISH ACV	DA14	72 x 144 x 94 mm	Input : 110 / 240 / 500V (To be specified while ordering only) Display : 26 mm LED Display Single Phase Network Accuracy Class : 1 4 1/2 Digit	110 / 230V AC	3,860
				24 / 110 / 220V DC	4,880
Optional Accessories	Accuracy Class 0.5 for RISH EINE & RISH ACI / ACV 72x144				210
	400Hz for RISH EINE & RISH ACI/ACV 72 x 144 only				200
	Side mounting clamp (Applicable for 96 x 96mm size, including EINE +)				20
	IP54 Kit (48 x 96 & 96 x 96)				
<b>Programmable DC Ammeter</b>					
RISH EINE +	EI99	96 x 96 x 35 mm 48 x 96 x 138 mm	Input : -10...0...+10mA / -20...0...+20mA / 4...20mA / -1...0...+1A / -5...0...+5A Accuracy Class : 0.5 4 Digit (Input range to be specified while ordering only)	40...300VAC/DC or 20...40VAC / 20...60VDC	1,260
<b>Non - Programmable DC Ammeter</b>					
RISH ADC	DD14	48 x 96 x 138 mm	Input : 0 - 20 & 4 - 20mA Display : 14 mm LED Display Accuracy Class : 0.1 4 1/2 Digit	110 / 230V AC	2,125
				24 / 110 V DC	2,780
		96 x 96 x 55 mm	Input : 0 - 20 & 4 - 20mA Display : 14 mm LED Display Accuracy Class : 0.1 4 1/2 Digit	110 / 230V AC	2,255
				24 / 110 V DC	2,875
72 x 144 x 94 mm	Input : 0 - 20 & 4 - 20mA Display : 26 mm LED Display Accuracy Class : 0.1 4 1/2 Digit	110 / 230V AC	4,235		
		24 / 110 V DC	4,975		

# Digital Panel Meters



Model	KMAT	Size (H x W x D)	Description	Auxiliary Supply	LP (INR)
<b>Programmable DC Voltmeter</b>					
RISH EINE +	EI99	96 x 96 x 35 mm 48 x 96 x 68 mm	Input : -75...0...+75mV / -150...0...+150mV / -5...0...+5V / -10...0...+10V / 0...500V / 0...1000V Accuracy Class : 0.5 4 Digit (Input range to be specified while ordering only)	40...300VAC/DC or 20...40VAC / 20...60VDC	1,260
<b>Non - Programmable DC Voltmeters</b>					
RISH VDC C		48 x 96 x 138 mm	Input : 0 - 60 / 75 / 150 / 200mV Display : 14 mm LED Display Accuracy Class : 0.1 4 1/2 Digit	110 / 230V AC	2,190
RISH VDC F			Input : 0 - 2 / 20 / 200 / 500 / 1000V Display : 14 mm LED Display Accuracy Class : 0.1 4 1/2 Digit	24 / 110 V DC	2,855
RISH VDC C	DD14	96 x 96 x 55 mm	Input : 0 - 60 / 75 / 150 / 200mV Display : 14 mm LED Display Accuracy Class : 0.1 4 1/2 Digit	110 / 230V AC	2,290
RISH VDC F			Input : 0 - 2 / 20 / 200 / 500 / 1000V Display : 14 mm LED Display Accuracy Class : 0.1 4 1/2 Digit	24 / 110 V DC	2,965
RISH VDC C		72 x 144 x 94 mm	Input : 0 - 60 / 75 / 150 / 200mV Display : 26 mm LED Display Accuracy Class : 0.1 4 1/2 Digit	110 / 230V AC	4,195
RISH VDC F			Input : 0 - 2 / 20 / 200 / 500 / 1000V Display : 26 mm LED Display Accuracy Class : 0.1 4 1/2 Digit	24 / 110 V DC	4,920
<b>Power DPM</b>					
Power DPM	PP44	96 x 96 x 80 mm	Input : 63.5 / 133 / 239.6 / 254V L-N 110 / 230 / 415 / 440V L-L & 1 or 5A Display : 11 mm or 20 mm LED Display Single & 3Ph 3W/4W Network Accuracy Class : 1) KW / KVA - $\pm 0.5\%$ of range 2) KVAR - $\pm 1\%$ of range Power Range : Max 694.4 MVA for 3 Phase and 333 MVA for 1Phase according to CT/PT Ratio 4 Digit	110 / 230VAC	4,010
			72 x 144 x 94 mm	Input : 63.5 / 133 / 239.6 / 254V L-N 110 / 230 / 415 / 440V L-L & 1 or 5A Display : 26 mm LED Display Single & 3Ph 3W/4W Network Accuracy Class : 1) KW / KVA - $\pm 0.5\%$ of range 2) KVAR - $\pm 1\%$ of range Max 694.4 MVA for 3 Phase and 333 MVA for 1Phase According to CT/PT Ratio 4 Digit	45...300VAC/DC or 20...40VAC / 20...60VDC
				110 / 230V AC	4,195
				24 / 110 V DC	4,920
				110 / 230V AC	4,195
				24 / 110 V DC	4,920



# Digital Panel Meters



Model	KMAT	Size (H x W x D)	Description	Auxiliary Supply	LP (INR)
<b>Power Factor DPM</b>					
PF DPM	PF44	96 x 96 x 80 mm	Input : 63.5 / 133 / 239.6 / 254V L-N 110 / 230 / 415 / 440V L-L & 1 or 5A Display : 11 mm or 20 mm LED Display Single & 3Ph 3W/4W Network Accuracy Class : $\pm 2^\circ$ 4 Digit	110 / 230VAC	4,195
		72 x 144 x 94 mm	Input : 63.5 / 133 / 239.6 / 254V L-N 110 / 230 / 415 / 440V L-L & 1 or 5A Display : 26 mm LED Display Single & 3Ph 3W/4W Network Accuracy Class : $\pm 2^\circ$ 4 Digit	12 - 48VDC 100 - 250 VAC/DC	4,825
RISH DPM Hz	DH10	48 x 96 x 68 mm	Input : 50...500V Range: 10...500Hz Accuracy : $\pm 0.5\text{Hz} \pm 1$ Digit 4 Digit	45...300VAC/DC or 20...40VAC / 20...60VDC	5,555
		96 x 96 x 55 mm			
		72 x 144 x 94 mm			1,390
<b>Frequency DPM</b>					
					3,600



# Multi-Function Meters



KMAT	Model	Description	Auxiliary Supply	LP (INR)
<b>LED Meters</b>				
<b>Basic Range</b>				
VF10	RISH OPTIMA VAF	Input : 100...500 V L-L 1 / 5A 3 Line LED Display 3Digit Single Ph & 3Ph 3W/4W Network Accuracy Class : 1 Parameters : VAF + RH + OH + NI + MM + RPM	40 - 300V AC/DC or 20-40 V AC / 20-60 V DC	1,610
DL10	RISH DELTA VAF	Input : 100...500 V L-L 1 / 5A 3 Line LED Display 4 Digit Single Ph & 3Ph 3W/4W Network Accuracy Class : 1 Parameters : VAF + RH + OH + NI + MM + RPM		2,245
DL20	RISH DELTA Power	Input : 100...500 V L-L 1 / 5A 3 Line LED Display Single Ph & 3Ph 3W/4W Network Accuracy Class : 1 Parameters : VAF + kW + kVA + kVA + PF + PA + RH + OH + NI + MM + RPM	40 - 300V AC/DC or 12- 48 V DC	3,380
DL30	RISH DELTA Energy	Input : 100...500 V L-L 1 / 5A 3 Line LED Display Single Ph & 3Ph 3W/4W Network Accuracy Class : 1 Parameters : VAF + kW + kVA + kVA + kWh + kVAh + kVAh + PF + PA + RH + OH + NI + MM + RPM + DM + MD		5,820
<b>AC Energy Meter</b>				
EM91	EM 3490SS	Input : 100 / 230 / 415 / 440 V L-L 1 / 5A Energy Meter with LED Display Single Ph & 3Ph 3W/4W Network Accuracy Class : 1 Parameters : kWh	110V/230V/380V AC or 12 - 48V DC / 100- 250V AC/DC	4,490
EM92	EM 3490DS	Input : 100 / 230 / 415 V L-L 1 / 5A Dual Source Energy Meter with LED Display Single Ph & 3Ph 3W/4W Network Accuracy Class : 1 Parameters : VAF + kW + kVA + kWh + kVAh + PF + RH + OH + NI		5,635
<b>DC Energy Meter</b>				
EM93	RISH EMDC -6001	Basic Model 6001 4 Channel (without USB RTC & In-built Memory for Data logging) Input Voltage : 10-60 / 61-200 / 201-1000V DC Accuracy Class : 1 Parameters : VA + kW + kWh + RH + OH + NI + DM	60...300V AC/DC or 12 - 70 VDC	8,010
EM93	RISH EMDC -6002	Higher Model 6002 4 Channel (with USB + RTC + In-built Memory for Data logging) Input Voltage : 10-60 / 61-200 / 201-1000V DC Accuracy Class : 1 Parameters : VA + kW + kWh + RH + OH + NI + DM + MD		11,210
EM94	RISH EMDC -6000	Basic Model 6000 1 Channel Input Voltage : 10-60 / 61-200 / 201-1000V DC Shunt Input : 50-150mV Accuracy Class : 0.5 Parameters : VA + kW + kWh + RH + OH + NI + DM	<b>NEW!</b> 60 - 300 V AC / DC or 12 - 60 VDC	3,880



# Multi-Function Meters



KMAT	Model	Description	Auxiliary Supply	LP (INR)
<b>LED Meters - Advance Range</b>				
MA3A	RISH MASTER 3430	Input : On site Programmable - Voltage - 57.7 - 346 VL-N, Current - 1/5A Single Phase Network Accuracy Class : 1 Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + MM + NC + THD	60- 300V AC/DC or 12-60 V AC/DC or For meter with Ethernet port the aux. supply will be 65...300V AC/DC	6,805
		Input : On site Programmable - Voltage - 100 - 600 VL-L, Current - 1/5A 3Ph 3W/4W Network Accuracy Class : 1 Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + MM + NC + THD		7,205
MA4A	RISH MASTER 3440	Input : On site Programmable - Voltage - 57.7 - 346 VL-N, Current - 1/5A Single Phase Network Accuracy Class : 1 Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + RH + OH + NI + MM + DM + MD + NC + THD	60- 300V AC/DC or 12-60 V AC/DC Aux supply will be 100-550 VAC/DC for accuracy class 0.2s or For meter with Ethernet port the aux. supply will be 65...300V AC/DC	8,815
		Input : On site Programmable - Voltage - 100 - 600 VL-L, Current - 1/5A 3Ph 3W/4W Network Accuracy Class : 1 Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + RH + OH + NI + MM + DM + MD + NC + THD		9,590
<b>LCD Meters</b>				
	RISH EM 1320	Input : On site Programmable - Voltage - 100 - 500 VL-L, Current - 1/5A Single Phase 3Ph 3W/4W Network with LCD Display Accuracy Class : 1 Parameters : kWh + kVAh		2,815
WH0P	RISH EM 1330	Input : On site Programmable - Voltage - 100 - 500 VL-L, Current - 1/5A Single Phase 3Ph 3W/4W Network with LCD Display Accuracy Class : 1 Parameters : VAF + kW + kVA + kWh + kVAh + PF + PA + RH + OH + NI + MM + NC	60...300VAC/DC or 20...40VAC or 20...60VDC	3,405
	RISH EM 1340	Input : On site Programmable - Voltage - 100 - 500 VL-L, Current - 1/5A Single Phase 3Ph 3W/4W Network with LCD Display Accuracy Class : 1 Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + RH + OH + NI + MM + DM + MD + NC + THD		5,130
	RISH EM 2340DS	Input : On site Programmable - Voltage - 100 - 500 VL-L, Current - 1/5A Dual Source Energy Meter with LCD Display Single Phase 3Ph 3W/4W Network Accuracy Class : 1 Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + RH + OH + NI + MM + DM + MD + NC + THD		4,075
MA4L	RISH LM 1350	Input : On site Programmable - Voltage - 100 - 600 VL-L, Current - 1/5A Big LCD Display 3Ph 3W/4W Network Accuracy Class : 0.5S Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + RH + OH + NI + MM + NC + THD + RPM	100-550V AC/DC or 12-60V AC/DC	8,120
	RISH LM 1360	Input : On site Programmable - Voltage - 100 - 600 VL-L, Current - 100mA over RJ12 Big LCD Display 3Ph 3W/4W Network Accuracy Class : 1 Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + RH + OH + NI + MM + NC + THD + RPM + IH		7,035
	RISH LM 1360	Input : On site Programmable - Voltage - 100 - 600 VL-L, Current - 100mA over RJ12 Big LCD Display 3Ph 3W/4W Network Accuracy Class : 1 Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + RH + OH + NI + MM + DM + MD + NC + THD + RPM + IH		9,205
	RISH LM 1360	Input : On site Programmable - Voltage - 100 - 600 VL-L, Current - 100mA over RJ12 Big LCD Display 3Ph 3W/4W Network Accuracy Class : 1 Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + RH + OH + NI + MM + DM + MD + NC + THD + RPM + IH		8,120

# Multi-Function Meters



KMAT	Model	Description	Auxiliary Supply	LP (INR)
	MultiLoad Monitor RISH ML 1400 (Class 1)	Input : On site Programmable - Voltage - 100 - 600 VL-L, Current - 100mA over RJ12 Big LCD Display 3Ph 3W/4W Network	100-550V AC/DC	16,500
	MultiLoad Monitor RISH ML 1410 (Class 0.5s)	Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + RH + OH + NI + MM + DM + MD + NC + THD + RPM + IH + RCM + TAR + 3HL		
MLM1		RS485 (Modbus RTU) - 2 Relay		17,880
	Optional Modules	RS485 (Modbus RTU) - 2 Relay - USB		1,400
		RS485 (Modbus RTU) - 4 Relay (USB not possible)		1,500
		Ethernet (Modbus TCP/IP) (USB & Relay not possible)		2,430
		Data-logging		On Request
		<b>QuickFix Module</b> - RJ00 - 3x single phase CTs with 100mA to 100mA (via RJ12)		500
		<b>QuickFix Module</b> - RJ01 - 3x CTs with 1A to 100mA (via RJ12)		990
		<b>QuickFix Module</b> - RJ05 - 3x CTs with 5A to 100mA (via RJ12)		1,050
		<b>QuickFix Module</b> - RC30 - 3x CBCT to RJ12		600



MultiLoad Monitor



QuickFix Module



Multi Function Meter with GSM Module (RISH LM 13xx, EM 13xx & EM 2340)



# Multi-Function Meters



KMAT	Model	Description	Auxiliary Supply	LP (INR)
<b>Touch Screen Meters</b>				
MA3I	RISH MASTER 3430 i	Input : On site Programmable - Voltage - 57.7 - 346 VL-N, Current - 1/5A Single Phase Network Accuracy Class : 1 Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + MM + NC + THD	60- 300V AC/DC or 12-60 V AC/DC or For meter with Ethernet port the aux. supply will be 65...300V AC/DC	8,915
		Input : On site Programmable - Voltage - 100 - 600 VL-L, Current - 1/5A 3Ph 3W/4W Network Accuracy Class : 1 Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + MM + NC + THD		9,520
MA4I	RISH MASTER 3440 i	Input : On site Programmable - Voltage - 57.7 - 346 VL-N, Current - 1/5A Single Phase Network Accuracy Class : 1 Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + RH + OH + NI + MM + DM + MD + NC + THD	60- 300V AC/DC or 12-60 V AC/DC Aux supply will be 100- 550 VAC/DC for accuracy class 0.2s or For meter with Ethernet port the aux. supply will be 65...300V AC/DC	11,360
		Input : On site Programmable - Voltage - 100 - 600 VL-L, Current - 1/5A 3Ph 3W/4W Network Accuracy Class : 1 Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + RH + OH + NI + MM + DM + MD + NC + THD		11,955
MA4S	RISH MASTER 3440 iDL	Input : On site Programmable - Voltage - 100 - 600 VL-L, Current - 1/5A 3Ph 3W/4W Network With Data logging Accuracy Class : 0.2s Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + RH + OH + NI + MM + DM + MD + NC + THD + IH + RTC Output - RS485 - 2 Pulse Output	100-550V AC/DC or 12- 60V AC/DC	18,420
		Input : On site Programmable - Voltage - 100 - 600 VL-L, Current - 1/5A 3Ph 3W/4W Network With Data logging Accuracy Class : 0.2s Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + RH + OH + NI + MM + DM + MD + NC + THD + IH + RTC Output - RS485 - 1 Pulse Output - 2 Analog Output		20,415
		Input : On site Programmable - Voltage - 100 - 600 VL-L, Current - 1/5A 3Ph 3W/4W Network With Data logging Accuracy Class : 0.2s Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + RH + OH + NI + MM + DM + MD + NC + THD + IH + RTC Output - Ethernet (MODBUS TCP/IP)		23,560
<b>Power Quality Monitor (Touch Screen)</b>				
PA00	RISH PQM	Input : On site Programmable - Voltage - 100 - 500 VL-L, Current - 1/5A 3Ph 3W/4W Network Accuracy Class : 0.5s Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + RH + OH + NI + MM + DM + MD + NC + THD + IH + RTC + SG + SW + OC	60-300V AC/DC	16,500
<b>Advance Dual Source Energy Meter (Touch Screen)</b>				
WH10	RISH 3490DS i	Input : On site Programmable - Voltage - 100 - 500 VL-L, Current - 1/5A 3Ph 3W/4W Network or 1 Phase Accuracy Class : 0.5s Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + RH + OH + NI + MM + DM + MD + NC + THD + IH + RTC + GE	60-300V AC/DC	17,400
<b>Smart Demand Controller (Touch Screen)</b>				
DM82	RISH DMC i	Input : On site Programmable - Voltage - 100 - 500 VL-L, Current - 1/5A 3Ph 3W/4W Network or 1 Phase Accuracy Class : 0.5s , 4 Relay output Parameters : VAF + kW + kVAr + kVA + kWh + kVArh + kVAh + PF + PA + RH + OH + NI + MM + DM + MD + NC + THD + IH + RTC	60-300V AC/DC	26,685
<b>Power Quality Analyzer (Touch Screen)</b>				
PA10	RISH PQA	Input : On site Programmable - Voltage - 100 - 866 VL-L, Current - 1/5A 3Ph 3W/4W Network Accuracy Class : 0.2s 8GB External memory card with 2 Relay RS 485 Parameters : Refer to the datasheet for details	85-265V AC/DC	95,370

# Multi-Function Meters

KMAT	Model	Description	Auxiliary Supply	LP (INR)
<b>Optional Accessories for Multi-function Meters*</b>				
1	Accuracy class 0.5	RM 3430, RM 3440, RM 3430i, RM 3440i, EM 3490SS, EM 3490DS		1,450
2	Accuracy class 0.2	RM 3430, RM 3440, RM 3430i, RM 3440i		2,405
3	Accuracy class 0.2s	RM 3440, RM 3440i, LM 1350/1360 (Aux supply will be 100-550 VAC/DC)		2,625
4	RS485 (Modbus )	EM 1320, EM 1330, EM 1340, EM 3490SS, EM 3490DS, EM 2340DS, DELTA Energy, PQM, DMCI, EM 3490DSi, RISH EMDC		1,155
5	RS485 + 2 Relay / Pulse	RM 3430, RM 3440, RM 3430i, RM 3440i, LM 1350/1360, PQM, EM 3490DSi,		1,155
6	RS485 + 2 Relay / Pulse	RISH EM DC 6000		1,575
7	RS485 + 1 Relay / Pulse + 2 Analog	RM 3430, RM 3440, RM 3430i, RM 3440i		3,005
8	1 Relay o/p (Pulse /Limit)	EM1320, EM 1330, EM 1340, EM 2340DS, EM 3490SS, EM 3490DS, DELTA Energy, OPTIMA / DELTA VAF, DELTA Power		1,065
9	2 Pulse /Relay	EM 1330, EM 1340, EM 2340DS, EMDC 600x		1,450
10	Ethernet Interface (MODBUS TCP/IP Protocol)	RM 3430, RM3430i, RM 3440, RM 3440i, PQM, LM 1350/60		3,710
11	Terminal Sealing	EM 3490SS		105
12	Converter 1	RS 485 to RS 232 Converter (Self Powered)		2,405
13	Converter 2	RS 485 to USB Converter (Self Powered)		5,775
14	4 Relay	RISH EM DC 600x		2,405
15	Data logging + Ethernet + RTC	LM 1350/1360		4,410
16	Data logging + USB + RTC + RS 485 + 2 Relay	LM 1350 / 1360 / EMDC 6000		3,360
17	IP 65 Kit	For 96x96 size models		130
18	Side mounting clamp	OPTIMA VAF / DELTA Series / LM 13xx Series / EM 13xx Series / EM 2340		20
19	SPAR-SD00-0707	GSM MODULE LM 13xx 0.5S		
20	SPAR-SD00-0709	GSM MODULE EM 13xx		17,345 (Including The software)
21	SPAR-SD00-0710	GSM MODULE EM 2340		
22	SPAR-SD00-0708	GSM MODULE LM13xx 0.2S		
23	SPAR-SD00-0717	SIM CARD (2 YEARS DATA)		2,300
24	SPAR-SD00-0718	SIM CARD (5 YEARS DATA)		5,000
25	Additional nodes	Additional Report / Notification / Alarm facility – required. For additional node get in touch with RIPL/ESL sales team.		2,500
26	DIN Rail Kit	Applicable for 96 x 96 Products		240

\*Before selecting any single or multiple optional accessories / outputs please refer to the respective datasheets to check feasibility

## List of abbreviations

VAF - Voltage Current & Frequency

kW - Active Power

kVAr - Reactive Power

kVA - Apparent Power

kWh - Active Energy

kVArh - Reactive energy

kVAh - Apparent Energy

PF - Power Factor

TAR - Tariff

PA - Phase Angle

RH - Run Hour

OH - On Hour

NI - No. of interruptions

MM - Min / Max Parameters

DM - Demand

MD - Max Demand

NC - Neutral Current

3HL - 3 Phase Health Monitoring

THD - % Total Harmonics distortion

IH - Individual Harmonics

RTC - Real time clock

SG - Sag

SW - Swell

OC - Over Current

GE - Generator Event

RCM - Residual Current Monitoring

KMAT	Model	Description	Auxiliary Supply	LP (INR)
<b>Programmable RISH CON Series</b>				
CM41	RISH CON I	Type : Current (TRMS) Input : 1...5A Output : 0...20mA / 4...20mA OR 0...10V Accuracy Class : 0.2		3,745
	RISH CON V	Type : Voltage (TRMS) Input : 57...500V Output : 0...20mA / 4...20mA OR 0...10V Accuracy Class : 0.2	60...300VAC/DC or 24...60VAC/DC	
CF41	RISH CON Hz	Type : Frequency (TRMS) Input : 45...55 / 48...52 / 55...65 / 45...65 Hz (57...500V) Output : 0...20mA / 4...20mA OR 0...10V Accuracy Class : 0.2		4,165
CP41	RISH CON P	Type : Power / Power Factor (TRMS) Input : 100...500V LL 1...5A Output : 0...20mA / 4...20mA OR 0...10V / -20mA...0...+20mA / - 10V...0...+10V Accuracy Class : 0.2, Class 0.5 for PF and Phase angle		8,020
PR43	RISH CON M	Type : Multi-transducer (TRMS) Input : 100 or 400V L-L 1 or 5A (To be selected while ordering only) Output : 0 / 2 / 4 Analog -20...0...20mA & 0 / 2 / 4 Relay (M-04 M-22 M-40) Communication Port : MODBUS RS 485 & USB Accuracy Class : 0.5	85...253 VAC / 90...320 VDC or 20...40 VAC / 20...60 VDC	14,950
<b>Programmable RISH DUCER MXX Series</b>				
	RISH DUCER M20	Type : Multi-transducer Input : 100 to 693V L-L 1 to 6A (Configurable) Output : 2 Analog Outputs 0...20mA OR 0...10V Communication Port : RS 232 Accuracy Class : 0.2 for Voltage & Current Class : 0.15 for Frequency Class : 0.25 for Power & Power Factor		16,490
	RISH DUCER M30	Type : Multi-transducer Input : 100 to 693V L-L 1 to 6A (Configurable) Output : 3 Analog Outputs 0...20mA OR 0...10V Communication Port : RS232 Accuracy Class : 0.2 for Voltage & Current Class : 0.15 for Frequency Class : 0.25 for Power & Power Factor		21,460
PM11	RISH DUCER M24	Type : Multi-transducer Input : 100 to 693V L-L 1 to 6A (Configurable) Output : 2 Analog Outputs 0...20mA OR 0...10V 4 Digital Outputs Communication Port : RS 232 Accuracy Class : 0.2 for Voltage & Current Class : 0.15 for Frequency Class : 0.25 for Power & Power Factor	24...60 or 85...230VAC/DC	21,075
	RISH DUCER M42	Type : Multi-transducer Input : 100 to 693V L-L 1 to 6A (Configurable) Output : 4 Analog Outputs 0...20mA OR 0...10V 2 Digital Outputs Communication Port : RS 232 Accuracy Class : 0.2 for Voltage & Current Class : 0.15 for Frequency Class : 0.25 for Power & Power Factor		22,155
	RISH DUCER M40	Type : Multi-transducer Input : 100 to 693V L-L 1 to 6A (Configurable) Output : 4 Analog Outputs 0...20mA OR 0...10V Communication Port : RS 232 & MODBUS RS 485 Accuracy Class : 0.2 for Voltage & Current Class : 0.15 for Frequency Class : 0.25 for Power & Power Factor		25,755

KMAT	Model	Description	Auxiliary Supply	LP (INR)
PM11	RISH DUCER M01	Type : Multi-transducer Input : 100 to 693V L-L 1 to 6A (Configurable) Communication Port : RS 232 & MODBUS RS 485 Accuracy Class : 0.2 for Voltage & Current Class : 0.15 for Frequency Class : 0.25 for Power & Power Factor	24...60 or 85...230VAC/DC	18,395
	RISH DUCER M00	Type : Multi-transducer Input : 100 to 693V L-L 1 to 6A (Configurable) Communication Port : RS 232 & LONBUS (LonWorks) Accuracy Class : 0.2 for Voltage & Current Class : 0.15 for Frequency Class : 0.25 for Power & Power Factor		22,950

### Non - Programmable RISH CON Series

CM22	RISH CON CA	Type : Current AVG (Single input Single output) Input : 0...1 / 0...5A Output : 0..10mA / 0...20mA / 2..10mA / 4...20mA / 0...5V / 0...10V Accuracy Class : 0.2		2,570
CM21	RISH CON CA	Type : Current TRMS (Single input Single output) Input : 0...1 / 0...5A Output : 0..10mA / 0...20mA / 2..10mA / 4...20mA / 0...5V / 0...10V Accuracy Class : 0.2	40...300VAC/DC or 24...60VAC/DC	3,430
CM22	RISH CON CV	Type : Voltage AVG (Single input Single output) Input : 0...63.5V to 0...500V Output : 0..10mA / 0...20mA / 2..10mA / 4...20mA / 0...5V / 0...10V Accuracy Class : 0.2		2,570
CM21	RISH CON CV	Type : Voltage TRMS (Single input Single output) Input : 0...63.5V to 0...500V Output : 0..10mA / 0...20mA / 2..10mA / 4...20mA / 0...5V / 0...10V Accuracy Class : 0.2		3,430
CM23	RISH CON CA	Type : Current - AVG (Single input Dual output) Input Range : 0...1 / 0...5A Output : 0..10mA / 0...20mA / 2..10mA / 4...20mA / 0...5V / 0...10V Accuracy Class : 0.2	60...300 VAC/DC or 20...40VAC / 20...60VDC	3,760
	RISH CON CV	Type : Voltage - AVG (Single input Dual output) Input Range : 0-63.5 / 0-100 / 0-110 / 0-150 / 0-220 / 0-230 / 0-240 / 0-250 / 0-300 / 0-330 / 0-415 / 0-450 / 0-500V AC Output : 0..10mA / 0...20mA / 2..10mA / 4...20mA / 0...5V / 0...10V Accuracy Class : 0.2		

### Optional Accessories for Electrical Transducers

400Hz	RISH CON P	560
RS 485		1,155
Display Module	RISH CON V, RISH CON I, RISH CON Hz, RISH CON P	780
Dual Output		700
Non Standard Input / Output	RISH CON CA / CV	970
PRKAB 601	Programming RS232 / USB & Configuration Adapter + Cable for RISH CON V, RISH CON I, RISH CON Hz, RISH CON P	1,260



KMAT	Model	Description	Auxiliary Supply	LP (INR)			
<b>CT with Inbuilt Transducers</b>							
CCTI	RISH CTDUCER 70 x 30mm	Type : Current TRMS (Single input Single output) Input : 0 - 50A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%	24V DC ± 15%	3,595			
		Type : Current AVG (Single input Single output) Input : 0 - 50A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%		2,175			
		Type : Current TRMS (Single input Single output) Input : 0 - 100A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%		3,655			
		Type : Current AVG (Single input Single output) Input : 0 - 100A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%		2,230			
		Type : Current TRMS (Single input Single output) Input : 0 - 150A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%		3,705			
		Type : Current AVG (Single input Single output) Input : 0 - 150A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%		2,290			
		Type : Current TRMS (Single input Single output) Input : 0 - 200A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%		3,760			
		Type : Current AVG (Single input Single output) Input : 0 - 200A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%		2,340			
		Type : Current TRMS (Single input Single output) Input : 0 - 250A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%		3,815			
		Type : Current AVG (Single input Single output) Input : 0 - 250A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%		2,395			
		Type : Current TRMS (Single input Single output) Input : 0 - 300A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%		3,870			
		Type : Current AVG (Single input Single output) Input : 0 - 300A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%		2,450			
		Type : Current TRMS (Single input Single output) Input : 0 - 150A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%		3,795			
		Type : Current AVG (Single input Single output) Input : 0 - 150A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%		2,385			
		Type : Current TRMS (Single input Single output) Input : 0 - 200A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%		3,850			
		Type : Current AVG (Single input Single output) Input : 0 - 200A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%		2,440			
		CCTI		RISH CTDUCER 90 x 40 mm	Type : Current TRMS (Single input Single output) Input : 0 - 250A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%	24V DC ± 15%	3,900
					Type : Current AVG (Single input Single output) Input : 0 - 250A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%		2,495
Type : Current TRMS (Single input Single output) Input : 0 - 300A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%	3,960						
Type : Current AVG (Single input Single output) Input : 0 - 300A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%	2,545						
Type : Current TRMS (Single input Single output) Input : 0 - 400A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%	4,015						
Type : Current AVG (Single input Single output) Input : 0 - 400A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%	2,605						
Type : Current TRMS (Single input Single output) Input : 0 - 500A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%	4,065						
Type : Current AVG (Single input Single output) Input : 0 - 500A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%	2,660						
Type : Current TRMS (Single input Single output) Input : 0 - 600A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%	4,120						
Type : Current AVG (Single input Single output) Input : 0 - 600A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%	2,710						
Type : Current TRMS (Single input Single output) Input : 0 - 750A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%	4,210						
Type : Current AVG (Single input Single output) Input : 0 - 750A Output : 0...20mA / 4...20mA Accuracy Class : 0.5%	2,790						
<b>Optional Accessory</b>							
Accessory	Din Rail Mounting Kit			75			



KMAT	Model	Description	Auxiliary Supply	LP (INR)
<b>Process Transducers</b>				
PI01	RISH PI 101	Type : Programmable Single output DC Isolator 1 Input-1 Output Input Range - DC Current :0...20 / 0...10 / 4...20 / 0...24 mA DC DC Voltage : 0...12 / 0...10 / 0...5 / 1...5 VDC, Output - DC Current : 0..10mA / 0...20mA / 2..10mA / 4...20mA DC Voltage : 0...5 / 1...5 / 0...10 / 2...10V Accuracy Class : 0.2	60...300 VAC/DC or 20...40VAC / 20...60VDC	2,155
PI02	RISH PI 102	Type : Programmable Dual output DC Isolator 1 Input-2 Output Input Range - DC Current :0...20 / 0...10 / 4...20 / 0...24 mA DC DC Voltage : 0...12 / 0...10 / 0...5 / 1...5 VDC, Output - DC Current : 0..10mA / 0...20mA / 2..10mA / 4...20mA DC Voltage : 0...5 / 1...5 / 0...10 / 2...10V Accuracy Class : 0.2		3,235
SI01	RISH CON SI-101	Type : Powerful DC Signal Isolator 1 Input-1 Output Input - DC Current : 0...20mA / 4...20mA / 1...5mA DC Voltage : 0...10V / 2...10V / 1...5V Output - DC Current : 0...20mA / 4...20mA DC Voltage : 0...10V / 2...10V Accuracy Class : 0.2	24...60V AC/DC or 60 ...300V AC/DC	2,135
SI02	RISH CON SI-102	Type : Powerful DC Signal Isolator 1 Input-2 Output Input - DC Current : 0...20mA / 4...20mA / 1...5mA DC Voltage : 0...10V / 2...10V / 1...5V Output - DC Current : 0...20mA / 4...20mA DC Voltage : 0...10V / 2...10V Accuracy Class : 0.2		3,205
	TV 808	Type : DC Isolator 1 Input-1 Output (S17 or E8 Housing) Input - 0.1mA...20mA & 4...20mA & 0.06V...40V Output - DC Current : 0...20mA 4...20mA DC Voltage : 0...5V 0...10V Accuracy Class : 0.2 for S17Housing, Class 0.5 for E8 Housing		2,695
TV 08	TV 808	Type : DC Isolator 1 Input-2 Output (S17 or E8 Housing) Input - 0.1mA...20mA & 4...20mA & 0.06V...40V Output - DC Current : 0...20mA 4...20mA DC Voltage : 0...5V 0...10V Accuracy Class : 0.2 for S17Housing, Class 0.5 for E8 Housing	24...60V AC/DC or 85 ...230V AC/DC	3,775
	TV 808	Type : DC Isolator 2 Input-2 Output (S17 Housing) Input - 0.1mA...20mA & 4...20mA & 0.06V...40V Output - DC Current : 0...20mA 4...20mA DC Voltage : 0...5V 0...10V Accuracy Class : 0.2 for S17 Housing		4,320

KMAT	Model	Description	Auxiliary Supply	LP (INR)
<b>Tap Position Transducers</b>				
	RISH CON TPT	Type : Tap Position Input - 0-17kOhm 0-18kOhm 0-20kOhm 0-25kOhm Output - DC Current : 0...20mA / 4...20mA DC Voltage : 0...10V / 2...10V Accuracy Class : 0.2		4,965
CT25	RISH CON TPT	Type : Tap Position with display Input - 0-17kOhm 0-18kOhm 0-20kOhm 0-25kOhm Output - DC Current : 0...20mA / 4...20mA DC Voltage : 0...10V / 2...10V Accuracy Class : 0.2	24...60V AC/DC or 60 ...300V AC/DC	5,945
	RISH CON TPT (96x96)	Type : Tap Position with display (96 X 96) Input - 0-17kOhm 0-18kOhm 0-20kOhm 0-25kOhm Output - DC Current : 0...20mA / 4...20mA DC Voltage : 0...10V / 2...10V Accuracy Class : 0.2		5,460
<b>Universal Transmitter</b>				
V604	RISH DUCER V604	Type : Programmable Transmitter Input - DC Voltage/Current / Resistance / Temp. etc. Output - DC Current : 0...20mA / 4...20mA DC Voltage : 0...5V / 1...5V / 0...10V / 2...10V Accuracy Class : 0.2	24...60V AC/DC or 85 ...230V AC/DC	8,365
<b>Temperature Transmitter</b>				
PT02	PT 602	Type : 1 Channel Temperature transmitter (1 I/P / 1 O/P) Input - Temperature (PT100) Output - DC Current : 0...20mA 4...20mA DC Voltage : 0...10V Accuracy Class : 0.5	24...60V AC/DC or 85 ...230V AC/DC	6,120
		Type : 2 Channel Temperature transmitter (2 I/P / 2 O/P) Input - Temperature (PT100) Output - DC Current : 0...20mA 4...20mA DC Voltage : 0...10V Accuracy Class : 0.5		7,665
<b>Optional Accessories for Process Transducers</b>				
RS 485		RISH CON TPT 96 X 96		1,155
Non Standard Input / Output		RISH DUCER TV808 and RISH CON SI 101 / SI 102		780
PRKAB 600		Programming RS232 & Configuration Adapter + Cable for RISH DUCER V604		1,260
PRKAB 601		Programming RS232 & Configuration Adapter + Cable for RISH CON TPT		



Group	Size	Description	Auxiliary Supply	LP (INR)
<b>PID Controllers - Basic</b>				
TC41	RE56 - 48 x 48 x 87.35 mm	Input: RTD Sensors: PT100 Thermocouple Sensors: J T K S R Output: 1x SSR driving & 1x Relay Output; Accuracy Class as per Datasheet;	60 ... 280 V AC/DC	1,350
TC40	RE57 - 48 x 48 x 87.35 mm	Input: RTD Sensors: PT100 PT1000, Thermocouple Sensors: J T K S R B N E, Standard Signals: 0/4 ... 20mA or 0 ... 5 / 10V; Output: 1x SSR driv ing Output or / Additional as with Extra Charges*	60 ... 280 V AC/DC or 20 ... 60V DC / 20 V – 40V AC	2,320
	RE96 - 96 x 96 x 72.15 mm			2,550
	RE77 - 48 x 96 x 72.15 mm			2,420
*Extra Charges for TC40 – Output combination to be specified while ordering and maximum 2 outputs are possible.		1x Relay Output		140
		2x SSR Outputs	-	170
		2x Relay Outputs		300



Group	Model	Order Code	LP (INR)
<b>Genset Controllers</b>			
GC10	AMF	GC10-A000000000000 - AUTOMATIC MAINS FAILURE	20,860
	ATS	GC10-AT000000000000 - AUTO TRANSFER SWITCH	19,850
	DGC	GC10-G000000000000 - GENSET CONTROLLER	19,360





# Protection and Monitoring Relays



## Basic Protection Relay

Product Code	System	Relay	LP (INR)	
<b>Phase Failure Relay - Rish Relay PHR</b>				
PR10-P411110000000	3Ø3W	PhR 3P3W 110VLL 50Hz NE 1 Relay		
PR10-P411210000000		PhR 3P3W 110VLL 50Hz ND 1 Relay		
PR10-P412110000000		PhR 3P3W 110VLL 60Hz NE 1 Relay		
PR10-P412210000000		PhR 3P3W 110VLL 60Hz ND 1 Relay		
PR10-P421110000000		PhR 3P3W 240VLL 50Hz NE 1 Relay		
PR10-P421210000000		PhR 3P3W 240VLL 50Hz ND 1 Relay		
PR10-P422110000000		PhR 3P3W 240VLL 60Hz NE 1 Relay		
PR10-P422210000000		PhR 3P3W 240VLL 60Hz ND 1 Relay		
PR10-P431110000000		PhR 3P3W 415VLL 50Hz NE 1 Relay		
PR10-P431210000000		PhR 3P3W 415VLL 50Hz ND 1 Relay		
PR10-P432110000000		PhR 3P3W 415VLL 60Hz NE 1 Relay		
PR10-P432210000000		PhR 3P3W 415VLL 60Hz ND 1 Relay		
PR10-P441110000000		PhR 3P3W 440VLL 50Hz NE 1 Relay		
PR10-P441210000000		PhR 3P3W 440VLL 50Hz ND 1 Relay		
PR10-P442110000000		PhR 3P3W 440VLL 60Hz NE 1 Relay		
PR10-P442210000000		PhR 3P3W 440VLL 60Hz ND 1 Relay		
PR10-P511110000000		3Ø4W	PhR 3P4W 110VLL 50Hz NE 1 Relay	1 Relay 930
PR10-P511210000000			PhR 3P4W 110VLL 50Hz ND 1 Relay	
PR10-P512110000000			PhR 3P4W 110VLL 60Hz NE 1 Relay	
PR10-P512210000000			PhR 3P4W 110VLL 60Hz ND 1 Relay	
PR10-P521110000000	PhR 3P4W 240VLL 50Hz NE 1 Relay			
PR10-P521210000000	PhR 3P4W 240VLL 50Hz ND 1 Relay			
PR10-P522110000000	PhR 3P4W 240VLL 60Hz NE 1 Relay			
PR10-P522210000000	PhR 3P4W 240VLL 60Hz ND 1 Relay			
PR10-P531110000000	PhR 3P4W 415VLL 50Hz NE 1 Relay			
PR10-P531210000000	PhR 3P4W 415VLL 50Hz ND 1 Relay			
PR10-P532110000000	PhR 3P4W 415VLL 60Hz NE 1 Relay			
PR10-P532210000000	PhR 3P4W 415VLL 60Hz ND 1 Relay			
PR10-P541110000000	PhR 3P4W 440VLL 50Hz NE 1 Relay			
PR10-P541210000000	PhR 3P4W 440VLL 50Hz ND 1 Relay			
PR10-P542110000000	PhR 3P4W 440VLL 60Hz NE 1 Relay			
PR10-P542210000000	PhR 3P4W 440VLL 60Hz ND 1 Relay			
<b>Current Relay - Rish Relay AR</b>				
PR10-A100110000000	1Ø	AR 1P NE 1 Relay	1 Relay 1,660	
PR10-A100120000000		AR 1P NE 2 Relay	2 Relay 1,815	
PR10-A100210000000		AR 1P ND 1 Relay	1 Relay 1,660	
PR10-A100220000000		AR 1P ND 2 Relay	2 Relay 1,815	
PR10-A300110000000	3Ø	AR 3P NE 1 Relay	1 Relay 1,815	
PR10-A300120000000		AR 3P NE 2 Relay	2 Relay 1,970	
PR10-A300210000000		AR 3P ND 1 Relay	1 Relay 1,815	
PR10-A300220000000		AR 3P ND 2 Relay	2 Relay 1,970	
<b>Voltage Relay - Rish Relay VR</b>				
PR10-V150110000000	1Ø	VR 1P 58-138VLN NE 1 Relay	1 Relay 1,195	
PR10-V150120000000		VR 1P 58-138VLN NE 2 Relay	2 Relay 1,355	
PR10-V180110000000		VR 1P 220-254VLN NE 1 RELAY	1 Relay 1,195	
PR10-V180120000000		VR 1P 220-254VLN NE 2 RELAY	2 Relay 1,355	
PR10-V310110000000	3Ø	VR 3P 110-240VLL NE 1 RELAY	1 Relay 1,355	
PR10-V310120000000		VR 3P 110-240VLL NE 2 RELAY	2 Relay 1,505	
PR10-V360110000000		VR 3P 415-480VLL NE 1 Relay	1 Relay 1,355	
PR10-V360120000000		VR 3P 415-480VLL NE 2 Relay	2 Relay 1,505	
PR10-V370110000000		VR 3P 381-415VLL NE 1 RELAY	1 Relay 1,355	
PR10-V370120000000		VR 3P 381-415VLL NE 2 RELAY	2 Relay 1,505	

Note

NE - Normally Energized

ND - Normally Deenergized



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\$ For productwise approbations, please contact local sales office

# Protection and Monitoring Relays



## Advance Digital Monitoring Relay

KMAT	Model	Description	Auxiliary Supply	LP (INR)
TR10	RISH Relay - I	Prog. 1PH Current 1-5A 1CO+1CO	60-300V AC/DC or 20-60V DC / 20-40V AC	2,980
		Prog. 1PH Current 1-5A 2CO		
		Prog. 1PH Current 1-5A 1CO		2,925
		Prog. 3PH Current 1-5A 1CO+1CO		3,020
		Prog. 3PH Current 1-5A 2CO		
	RISH Relay V/Hz	Prog. 3PH Current 1-5A 1CO		2,970
		Prog. 1PH & 3PH V 100-600V L-L 1CO+1CO		2,720
		Prog. 1PH & 3PH V 100-600V L-L 2CO		2,665
		Prog. 1PH & 3PH V 100-600V L-L 1CO		
		Prog. 1PH & 3PH VOLT 100-600V L-L 1CO+1CO		2,220
RISH Relay V	Prog. 1PH & 3PH VOLT 100-600V L-L 2CO			
	Prog. 1PH & 3PH VOLT 100-600V L-L 1CO	2,165		
ELR1	RISH ELR (Din)	ELR SINGLE CBCT 1CO+1CO		2,655
		ELR SINGLE CBCT 2CO		
		ELR SINGLE CBCT 1CO	2,600	
	RISH ELR+(Din)	ELR+ Dual CBCT 1CO+1CO	3,620	
	RISH ELR VI(NE) (Din)	ELR VI(NE) CBCT+E to N V+I 1CO+1CO	3,955	
	RISH ELR VI (Din)	ELR VI CBCT+V+I 1CO+1CO	3,910	
		ELR SINGLE CBCT 1CO	2,600	
		RISH ELR (96x96mm)	ELR SINGLE CBCT 1CO+1CO	2,655
			ELR SINGLE CBCT 2CO	2,655
		RISH ELR+ (96x96mm)	ELR+ DUAL CBCT 1CO+1CO	3,620
RISH ELR VI (96x96mm)	ELR VI CBCT+V+I 1CO+1CO	3,910		
RISH ELR VI (NE) (96x96mm)	ELR VI(NE) CBCT+E to N V+I 1CO+1CO	3,955		
CB01		TW-E CBCT 73/30 (50) 30mA-30A 600:1		945
CB02		TW-E CBCT 95/50 (40) 30mA-30A 600:1		1,320
CB03	RISH CBCT	TW-E CBCT 135/85 (30) 30mA-30A 600:1		1,495
CB04		TW-E CBCT 165/130 (30) 30mA-30A 600:1		1,615
CB05		TW-E CBCT 260/200 (20) 30mA-30A 600:1		2,340
<b>Optional Accessory</b>				
		Extra charges for PRKAB 600 programming cable		1,260



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# Protection and Monitoring Relays



## Static Relay

KMAT	Model	Description	Auxiliary Supply	LP (INR)
<b>AC Current Relay</b> Input - 2 / 3 / 4 / 6 / 8 / 10A or 1A / 5A CT Operated				
LA21	252 - PAU	Single Phase Under Current	AC : 120 / 230 / 240 / 400 / 415V	1125
	252 - PAO	Single Phase Over Current		
LA31	253 - PAD	Single Phase Combined Under/Over Current		
	253 - PAV	Three Phase Under Current		2680
	253 - PAP	Three Phase Over Current		2680
<b>Optional Accessories</b>				
Extra charges for DC Aux : 12 / 24 / 48 / 110V				120
Extra charges for any non-standard settings other than Datasheet				
<b>AC Voltage Relay With Adjustable Differential</b> Input - 100 / 110 / 220 / 230 / 240 / 380 / 400 / 415 / 440V				
LK21	252 - PVU	Single Phase Under Voltage	Self Powered	1480
	252 - PVO	Single Phase Over Voltage		
LK31	253 - PVB	Single Phase Combined Under/Over Voltage.		2220
LK21	252 - PVV	3 Phase 4 Wire Under Voltage		1480
	252 - PVP	3 Phase 4 Wire Over Voltage		
LK31	253 - PVE	3 Phase 4 Wire Combined Under/Over Voltage		2220
LK21	252 - PVK	3 Phase 3 Wire Under Voltage	1480	
	252 - PVA	3 Phase 3 Wire Over Voltage		
LK31	253 - PVM	3 Phase 3 Wire Combined Under/Over Voltage	2220	
<b>Optional Accessories</b>				
Extra charges for Aux supply / Time Delay				120
<b>AC Voltage Relay With Adjustable Time Delay</b> Input - 100 / 110 / 220 / 230 / 240 / 380 / 400 / 415 / 440V				
LJ21	252 - PVZ	Single Phase Under Voltage	Self Powered	1480
	252 - PVH	Single Phase Over Voltage		
	252 - PVX	3 Phase 4 Wire Under Voltage		
	252 - PVS	3 Phase 4 Wire Over Voltage		
	252 - PVJ	3 Phase 3 Wire Under Voltage		
	252 - PVC	3 Phase 3 Wire Over Voltage		
<b>Optional Accessory</b>				
Extra charges for Aux supply				120
<b>Frequency Relay With Adjustable Time Delay</b> Range - 40/60Hz 50/70Hz, 360/440Hz Input - 100 / 110 / 220 / 230 / 240 / 380 / 400 / 415 / 440V				
LF21	252 - PHU	Under Frequency	Self Powered	1300
	252 - PHO	Over Frequency		
LF31	253 - PHD	Combined Under/Over Frequency	2220	
<b>Optional Accessory</b>				
Extra charges for Aux supply				120
<b>Combined Under / Over Voltage &amp; Frequency</b> Range - 40/60Hz 50/75Hz 360/440Hz Input - 120 / 240V				
LC61	256 - PHV	Single Phase Combined Under/Over Voltage and Frequency.	Self Powered	4475
<b>Phase Sequence &amp; Phase Failure</b> Input - 100 / 110 / 220 / 230 / 240 / 380 / 400 / 415 / 440V				
LP21	252 - PVR	3 Phase 3 Wire or 4 Wire	Self Powered	1025

# Protection and Monitoring Relays



## Static Relay

KMAT	Model	Description	Auxiliary Supply	LP (INR)
<b>Thermistor Trip Relay</b> Range : Tri p 2500-3500 Ohm Reset :1500 -2300 Ohm.				
LT21	252 - PMT	Automatic Reset	AC : 110 / 120 / 220 / 230 / 240V	1240
	252 - PMM	Manual Reset		
<b>Synchro Check Relay (Paralleling)</b> Input - 100 / 110 / 220 / 230 / 240 / 380 / 400 / 415 / 440V				
LS61	256 - PLL	1 Generator 1 Bus or 2 Generator Systems.	Self Powered	2395
	256 - PLD	1 Generator with 'DEAD BUS' facility		3000
<b>Phase Balance Relay</b> Input - 100 / 110 / 220 / 230 / 240 / 380 / 400 / 415 / 440V				
LB21	252 - PSF	Phase loss and Unbalance	Self Powered	1240
	252 - PSG	Phase loss Unbalance and Under Voltage.		1625
<b>Reverse Power (Current) Relay</b> Input - 100 / 110 / 220 / 230 / 240 / 380 / 400 / 415 / 440V Input – 1/2/3/4/5/6/8/10A				
LR61	256 - PAS	Single Phase or 3 Phase 4 Wire.	Self Powered	2590
	256 - PAT	3 Phase 3 Wire.		2640
	256 - PAQ	Single Phase or 3 Phase 4 Wire with test push button.		4380
	256 - PAR	3 Phase 3 Wire with test push button.		
<b>DC Voltage Relay</b> DC Voltage -18 to 20 or 20 to 32Vdc				
LD21	252 - PDU	DC Under Voltage with external time delay	Self Powered	1625
	252 - PDO	DC Over Voltage with external time delay		1760
	253 - PDE	DC Under Voltage with external external differential		1480
<b>DC Milivolt Relay</b> Input-50/60/75/100/150mV ( Span- Min. 10mV )				
LM21	252 - PBS	DC Milivolt Low Trip	AC : 120 / 240V	2035
	252 - PBT	DC Milivolt High Trip		
	Extra charges for DC Aux : 12 / 24 / 48 / 110V			
<b>Transducer Trip Relay</b> Input - DC current - 1 / 5 / 10 / 20 / 4 - 20mA & DC voltage - 1 to 50V				
LX21	252 - PBA	Low Trip	AC : 120 / 240V	1810
	252 - PBB	High Trip		
LX31	253 - PBV	Combined High/Low		3600
Extra charges for DC Aux : 12 / 24 / 48 / 110V				120
<b>Motor Protection Relay</b> Input - 100 / 110 / 220 / 230 / 240 / 380 / 400 / 415 / 440V				
LL31	253 - MPR	Motor Protection Relay ( Phase Loss Reversal Unbalanced)	AC : 110 / 220 / 230 / 240 / 380 / 415V	1945
<b>Earth Fault Relay</b> Input - 1A / 5A				
LE31	253 - EFR	Earth Fault Relay	AC : 230V	2340

# Battery Chargers & Power Supplies



## Battery Charger

Order Code	Model No	Input Voltage	Output Voltage	Power Range	LP (INR)
BC03-1D0000000000	1P Elite 3612A	115 V AC/ 230V AC	12 V DC	36 W	2,800
BC03-1F0000000000	1P Elite 7212A		24 V DC	72 W	3,050
BC03-1G0000000000	1P Elite 7224A		24 V DC	120 W	3,150
BC03-1A0000000000	1P Elite 12012A		12 V DC		
BC03-1B0000000000	1P Elite 12024A		24 V DC		
BC03-1E0000000000	1P Elite 12030A		30 V DC		



## Power Supply

Order Code	Model No	Input Voltage	Output Voltage	Output Current	Power Range	LP (INR)	
<b>RISH FLEX - E SERIES</b>							
<b>Single Phase - Plastic Housing</b>							
RF14-1N0000000000	1P FLEX - e 1515A	115 V AC/ 230V AC	15 V DC	1.0 A	15 W	1,460	
RF14-1M0000000000	1P FLEX - e 1512A		12 V DC	1.25 A			
RF14-1P0000000000	1P FLEX - e 1524A		24 V DC	0.63 A	30 W	1,620	
RF14-1S0000000000	1P FLEX - e 3012A		12 V DC	3.0 A			
RF14-1K0000000000	1P FLEX - e 3024A		24 V DC	1.5 A			
RF14-1R0000000000	1P FLEX - e 4512A		12 V DC	3.75 A	45 W	1,770	
RF14-1L0000000000	1P FLEX - e 4524A		24 V DC	1.75 A			
RF14-1Q0000000000	1P FLEX - e 6012A		12 V DC	5.0A	60 W	1,855	
RF14-1A0000000000	1P FLEX - e 6024A		24 V DC	2.5 A			
<b>Single Phase - Metal Housing</b>							
RF14-1B0000000000	RISH FLEX - e 9024A	115 V AC/ 230V AC	24 V DC	5 A	95 to 120 W	2,420	
RF14-1C0000000000	RISH FLEX - e 17024A		7.5 A	120 to 180 W	2,550		
<b>Two Phase - Metal Housing</b>							
RF14-2I0000000000	RISH FLEX - e 9024B	230V AC / 400V AC	24 V DC	5 A	95 to 120 W	3,385	
RF14-2J0000000000	RISH FLEX - e 17024B		7.5 A	120 to 180 W	3,540		
<b>RISH FLEX SERIES</b>							
<b>Single Phase - Metal Housing</b>							
RF13-1T0000000000	RISH FLEX 6005A	115 V AC/ 230V AC	5 V DC	5 A	35 W	2,240	
RF13-1S0000000000	RISH FLEX 6012A		12 V DC	6 A	72 W		
RF13-1A0000000000	RISH FLEX 6024A		24 V DC	3 A	120 W	3,235	
RF13-1Y0000000000	RISH FLEX 9012A		12 V DC	10 A			
RF13-1B0000000000	RISH FLEX 9024A		24 V DC	5 A	150 W	3,420	
RF13-120000000000	RISH FLEX 15012A		12 V DC	12.5 A			
RF13-130000000000	RISH FLEX 15024A		24 V DC	6.25 A	180 W	3,595	
RF13-140000000000	RISH FLEX 15048A		48 V DC	3.13 A			
RF13-1R0000000000	RISH FLEX 17012A		12 V DC	14 A	240 W	6,090	
RF13-1C0000000000	RISH FLEX 17024A		24 V DC	7.5 A			
RF13-1F0000000000	RISH FLEX 17048A		48 V DC	3.75 A	336 W	6,765	
RF13-1Z0000000000	RISH FLEX 24024A		24 V DC	10 A			
RF13-1P0000000000	RISH FLEX 28012A		12 V DC	16 A	480 W	7,495	
RF13-1D0000000000	RISH FLEX 28024A		24 V DC	14 A			
RF13-1G0000000000	RISH FLEX 28048A		48 V DC	7 A	600 W	8,325	
RF13-1I0000000000	RISH FLEX 48024A		24 V DC	20 A			
RF13-1E0000000000	RISH FLEX 50024A		24 V DC	25 A	7,285	7,285	
RF13-1H0000000000	RISH FLEX 50048A		48 V DC	12 A			
<b>Two Phase - Metal Housing</b>							
RF13-2I0000000000	RISH FLEX 9024B		230V/ 400V/ 500 V AC	24 V DC	5 A	120 W	4,270
RF13-2J0000000000	RISH FLEX 17024B			7.5 A	180 W	4,375	
RF13-2K0000000000	RISH FLEX 28024B			14 A	336 W	7,285	
<b>Three Phase - Metal Housing</b>							
RF13-3L0000000000	RISH FLEX 50024B	400 – 500 V AC	24 V DC	25 A	600 W	9,265	
RF13-3M0000000000	RISH PST 2430B	400 – 480 V AC		30 A	720 W	19,815	
RF13-3N0000000000	RISH PST 2440B			40 A	960 W	23,830	
<b>Redundancy Module</b>							
RF13-00M0000000000	RISH MR220	10 – 60 V DC	10 – 60 V DC	0 – 25 A (max)	----	2,030	

# Product End-Of-Life



KMAT	Model	Description	Auxiliary Supply
<b>Counter Type Energy Meter</b>			
EM90	RISH EM 3490	Input : 100 / 230 / 415 / 440 V L-L for 3Ph 3W/4W or 110 / 240 V L-N for Single Phase 1A / 5A Counter type Energy Meter with Fixed CT Ratio Accuracy Class : 1 Parameters : kWh	Self Powered AC

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## Terms and conditions

- This issue of Price List supersedes all previous Price Lists
- All Prices are in INR
- The prices are subject to change without prior notice
- List Prices mentioned are exclusive of all taxes & duties
- Prices charged will be as prevailing on the date of dispatch
- Minimum order value criterion should be observed while ordering
- The company reserves the right to supply goods at its discretion
- For any non-standard requirement, please contact nearest sales office regarding technical feasibility, price & delivery

## Warranty

- All the products listed in the Price List carry a warranty of 18 months against manufacturing defects (unless otherwise specified) from the date of purchase or 12 months from the date of commissioning, whichever is earlier

## Note

- To facilitate the ordering kindly make use of product configurator
- Kindly refer respective datasheets for detailed technical specifications. Technical specs given in this price list are in abbreviated form only for easy understanding. Selection of products must be done from the datasheets.
- Since the product approvals mentioned in the price list are on generic header level, kindly contact to our nearest sales office for product-wise approvals
- For any enquiry regarding Energy Measurement Software and Solar Inverters, kindly contact our sales office.



Product up-gradation is a continuous process. Hence data in this price list is subject to change without prior notice. For the latest information, please get in touch with our sales offices



Measure



Control



Record



Analyze

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