

Meters and Current Transformers Overview



Energy Meters	RI-F100	RI-F200	RI-F220	RI-F500	RI-F550	RI-D140	RI-D240	
								
	MID 					MID 		
	Type	Three Phase Multifunction MID Certified	Single and Three Phase Multifunction	Single and Three Phase Multifunction	Multifunction Network Analyser - Single and Three Phase	Multifunction Network Analyser - Single and Three Phase	Single and Three Phase Multifunction MID Certified	Single and Three Phase Multifunction
	Features	• DIN 96 panel mounted • -/5A current transformer input • Three phase network compatible • Programmable voltage and CT ratio • True RMS measurement • MID B+D Certified • High definition white backlit LCD display • Compact size - only 50mm panel depth • Simple programming and operation • Pulse output and RS485 Modbus communication • Auto and manual page scrolling	• DIN 96 panel mounted • -/1A or -/5A current transformer input • Single phase or three phase network compatible • Programmable voltage and CT ratio • True RMS measurement • High definition white backlit LCD display • Compact size - only 50mm panel depth • Simple programming and operation • Pulse output and Modbus communication (M-Bus available) • Auto and manual page scrolling	• DIN 72 panel mounted • -/1A or -/5A current transformer input • Single phase or three phase network compatible • Programmable voltage and current transformer ratio • True RMS measurement • High definition white backlit LCD display • Simple programming and operation • Pulse output and Modbus communication (M-Bus available) • Auto and manual page scrolling	• DIN 96 panel mounted • Tactile buttons and mono graphical display • Real time clock • Multi-tariff measurement • 2 x Digital inputs and 2 x relay outputs • Pulse output and Modbus communication • Harmonics up to the 63rd • Active energy EN62053-22 Class 0.2S • Event and alarm recording • Up to four additional plug-in modules • Waveform capture, waveform display, phasor diagrams etc. • IP65 front	• DIN 96 panel mounted • Touch buttons and colour graphical display • Real time clock • Multi-tariff measurement • 2 x Digital inputs and 2 x relay outputs • Pulse output and Modbus communication • Harmonics up to the 63rd • Active energy EN62053-22 Class 0.2S • Event and alarm recording • Up to four additional plug-in modules • Waveform capture, waveform display, phasor diagrams etc. • IP65 front	• Four module DIN rail mounted • Energy pulse LED • -/1A or -/5A current transformer input (MID certification only on 5A current transformers) • Single phase or three phase network compatible • Programmable voltage and CT ratio • True RMS measurement • MID B+D Certified • High definition white backlit LCD display • Simple programming and operation • Modbus communication • Auto and manual page scrolling	• Four module DIN rail mounted • Energy pulse LED • -/1A or -/5A current transformer input • Single phase or three phase network compatible • Programmable voltage and current transformer ratio • True RMS measurement • High definition white backlit LCD display • Simple programming and operation • Modbus or M-Bus communication • Auto and manual page scrolling
Parameters	V (L-L, L-N) I, PF, THD, Hz, Neutral current, Hours Run, Power (Active, Reactive and Apparent, Min./Max. demand), Energy (Active, reactive and apparent), Import and export energy			V(Phase/Line/System) I(Line/System), PF(Line/System /Displacement), THD, Hz, K, Hours Run, Power (Active, Reactive, Apparent, Min./Max. demand), Unbalance, Energy (Active, reactive and apparent), Import and export energy, Waveform, Flicker and Phase Diagrams		V (L-L, L-N) I, PF, Hz, Neutral current, Power (Active, Reactive and Apparent, Min./Max. demand), Energy (Active, reactive and apparent), Import and export energy		
Mounting	Panel - DIN 96	Panel - DIN 96	Panel - DIN 72	Panel - DIN 96	Panel - DIN 96	DIN Rail (35mm)	DIN Rail (35mm)	
Connection	Current Transformer	Current Transformer	Current Transformer	Current Transformer	Current Transformer	Current Transformer	Current Transformer	
Communication Options	Modbus and Pulse (M-Bus and Pulse soon)	Pulse Modbus and Pulse M-Bus and Pulse	Pulse Modbus and Pulse	Built-in Modbus & Pulse Extendable with modules	Built-in Modbus & Pulse Extendable with modules	Modbus (M-Bus and Pulse soon)	Modbus M-Bus	
MID Certified		—	—	—	—		—	
Dims. (mm) H x W x D	99 x 99 x 50	99 x 99 x 50	72 x 72 x 97.5	96 x 76 x 60.5	96 x 76 x 60.5	90 x 70 x 68	90 x 70 x 68	

Energy Meters

RI-D18-100



RI-D175



RI-18-45



RI-D35



RI-76-100



RI-70-100



RI-D70



Type

Single Phase
Multifunction

Single phase
kWh
MID Certified

Single phase
kWh
MID certified

Single Phase
Multifunction
MID Certified

Single Phase
kWh
MID Certified

Three Phase
kWh
MID Certified

Three Phase
kWh
MID Certified

Features

- Single module width DIN rail mounted
- 100A direct connected
- High definition LCD display with blue back-light
- Import active energy measurement
- RS485 Modbus communication
- LED pulse indication
- Simple programming and operation
- Auto & manual page scrolling

- Single module width DIN rail mounted
- 45A direct connection
- Available with LCD or mechanical display
- Import Energy measurement
- MID B+D Certified
- Modbus or M-Bus versions available
- LED pulse indication

- Single module width DIN rail mounted
- 45A direct connected
- High definition LCD display
- Import active energy measurement
- Single pulse output
- MID B+D Certified
- LED pulse indication

- Two module width DIN rail mounted
- 100A direct connected
- High definition LCD display with white backlight
- Import and export energy measurement
- RS485 Modbus or M-Bus models available
- Two pulse outputs
- MID B+D Certified
- Dual LED pulse indication
- Simple programming and operation
- Auto or manual page scrolling

- Four module width DIN rail mounted
- 100A direct connected
- High definition LCD display
- Import active energy measurement
- Single pulse output
- MID B+D Certified
- LED pulse indication

- Four module width DIN rail mounted
- 100A direct connected
- High definition LCD display
- Import active energy measurement
- Single pulse output
- MID B+D Certified
- LED pulse indication

- Four module width DIN rail mounted
- 100A direct connected
- High definition LCD display
- Import active energy measurement
- Single pulse output
- MID B+D Certified
- LED pulse indication

Parameters

V (L-N), I, PF, Active Power, Reactive Power, Apparent Power, Import Active Energy (kWh)

kWh
(Via Modbus - V, I, PF, Hz)

kWh

V (L-N), I, PF, Active Power, Reactive Power, Apparent Power, Import Active Energy (kWh)

kWh

V (L-L, L-N), I, PF, Active Power, Reactive Power, Apparent Power, Import Active Energy (kWh)

Mounting Connection

DIN Rail (35mm)
Direct

DIN Rail (35mm)
Direct

DIN Rail (35mm)
Direct

DIN Rail (35mm)
Direct

DIN Rail (35mm)
Direct

DIN Rail (35mm)
Direct

DIN Rail (35mm)
Direct

Communication Options

Modbus

Modbus and Pulse
M-Bus and Pulse

Pulse

Modbus and Pulse
M-Bus and Pulse

Pulse

Pulse

Modbus and Pulse
M-Bus and Pulse

MID Certified

—

✓

✓

✓

✓

✓

✓

Dims. (mm) H x W x D

95 x 18 x 72

95 x 18 x 72

120 x 17.5 x 63

90 x 35 x 65

100 x 76 x 65

110 x 70 x 64.5

115 x 78 x 65

	RI-F300	RI-F400	RI-D340	RI-D440	RI-D360	RI-D460	RI-D480
easywire[®] Energy Meters	 MID ✓		 MID ✓		 MID ✓		
Type	Single and Three Phase Multifunction MID Certified	Single and Three Phase Multifunction	Three Phase Multifunction MID Certified	Three Phase Multifunction	Dual Load Three Phase Multifunction MID Certified	Dual Load Three Phase Multifunction	Quad Load Three Phase Multifunction
Features	- DIN 96 panel mounted - Input from easywire[®] Current Transformers - Single phase or three phase network compatible - Programmable voltage and CT ratio - True RMS measurement - MID B+D Certified - Backlit LCD display - Easy to program & operate - Pulse output and Modbus communication - Daisy chaining up to 32 meters from one supply	- DIN 96 panel mounted - Input from easywire[®] Current Transformers (-/1A or -/5A CTs with converter) - Single phase or three phase network compatible - Programmable voltage and current transformer ratio - True RMS measurement - Backlit LCD display - Easy to program & operate - Pulse output and Modbus communication - Daisy chaining up to 32 meters from one supply	- Four module DIN rail mounted - Input from easywire[®] Current Transformers - Energy pulse LED - Single phase or three phase network compatible - Programmable voltage and CT ratio - True RMS measurement - MID B+D - Backlit LCD display - Easy to program & operate - Pulse output and Modbus communication (M-Bus available) - Daisy chaining up to 32 meters from one supply	- Four module DIN rail mounted - Input from easywire[®] Current Transformers (-/1A or -/5A CTs with converter) - Energy pulse LED - Single phase or three phase network compatible - Programmable voltage and CT ratio - True RMS measurement - Backlit LCD display - Easy to program & operate - Pulse output and Modbus communication - Daisy chaining up to 32 meters from one supply	- Four module DIN rail mounted 2 x Inputs from easywire[®] CTs - Energy pulse LED - Single phase or three phase network compatible - CT ratios programmable by load (Load 1 and 2) - Programmable voltage transformer ratio - True RMS measurement - MID B+D Certified - Backlit LCD display - Easy to program & operate 2 x Pulse outputs and Modbus communication (M-Bus available) - Linkable meter supply	- Four module DIN rail mounted 2 x separate 3 Phase or 6 x Single Phase inputs from easywire[®] CTs (-/1A or -/5A CTs with converter) - Energy pulse LED - Single phase or three phase network compatible - CT ratios programmable by load (Load 1 and 2) - Programmable voltage transformer ratio - True RMS measurement - Backlit LCD display - Easy to program & operate 2 x Pulse outputs and Modbus communication - Linkable meter supply	- Four module DIN rail mounted 4 x separate 3 Phase or 12 x Single Phase inputs from easywire[®] CTs (-/1A or -/5A CTs with converter) - Energy pulse LED - Single phase or three phase network compatible - CT ratios programmable by load (Load 1, 2, 3, 4) - Programmable voltage transformer ratio - True RMS measurement - Backlit LCD display - Easy to program & operate - Modbus communication - Linkable meter supply
Parameters	V (L-L, L-N) I, PF, THD, Hz, Neutral current, Hours Run, Power (Active, Reactive and Apparent, Min./Max. demand), Energy (Active, reactive and apparent), Import and export energy		V (L-L, L-N) I, PF, Hz, Neutral current, Power (Active, Reactive and Apparent, Min./Max. demand), Energy (Active, reactive and apparent), Import and export energy				V (L-L, L-N) I (Load 1/2/3/4 or 12x Single Phase) PF, Hz, Power (Active, Reactive, Apparent, Min./Max. demand), Energy (Active, reactive and apparent)
Mounting	Panel - DIN 96	Panel - DIN 96	DIN Rail (35mm)	DIN Rail (35mm)	DIN Rail (35mm)	DIN Rail (35mm)	DIN Rail (35mm)
Connection	Current Transformer	Current Transformer	Current Transformer	Current Transformer	Current Transformer	Current Transformer	Current Transformer
Communication Options	Pulse Modbus and Pulse	Pulse Modbus and Pulse	Modbus and Pulse M-Bus and Pulse	Modbus and Pulse	Modbus and 2 x Pulse M-Bus and 2 x Pulse	Modbus and 2 x Pulse	Modbus
MID Certified	✓	—	✓	—	✓	—	—
Dims. (mm) H x W x D	99 x 99 x 50	99 x 99 x 50	90 x 70 x 68	90 x 70 x 68	90 x 70 x 68	90 x 70 x 68	90 x 70 x 68

easywire® Three Phase Current Transformers	RI-CT240-EW	RI-CT242-EW	RI-CT249-EW	RI-CT248-EW	RI-CT250-EW	
						
	Primary Current	60...160A	60...250A	60...160A	250...630A	630...1600A
	Secondary Current	330mV	330mV	330mV	330mV	330mV
	Centres	25mm	35mm	29mm	45mm	70mm
	Cable Diameter	Ø 15mm	Ø 21mm	Ø 16mm	Ø 31mm	Ø 50mm
	Aperture	15.5 x 30mm	21 x 25mm	16 x 20mm	31 x 31mm	54 x 50mm
	DIN Rail Mount	Supplied	Supplied	Supplied	Supplied	Supplied
	Foot Mount	Push in	Push in	Push in	Push in	Push in
	Busbar Mount	✓	✓	✓	✓	✓
	Sealable Terminal Cover	✓	✓	✓	✓	✓
	Dimensions (mm) H x W x D	80 x 76 x 76	80 x 105 x 54	68 x 90 x 76	90 x 140 x 54	124 x 215 x 54

Three Phase Current Transformers	TAS240	TAS242	TAS248	TAS250	Rogowski Coils
					
	Primary Current	60...200A	60...250A	250...630A	630...1600A
	Secondary Current	5A or 1A	5A or 1A	5A or 1A	5A or 1A
	Centres	25mm	35mm	45mm	70mm
	Cable Diameter	Ø 15mm	Ø 21mm	Ø 31mm	Ø 50mm
	Aperture	15.5 x 30mm	21 x 25mm	31 x 31mm	54 x 50mm
	DIN Rail Mount	—	—	—	Supplied
	Foot Mount	Integral Moulded Foot	Integral Moulded Foot	Integral Moulded Foot	Push in
	Busbar Mount	—	—	—	✓
	Sealable Terminal Cover	✓	✓	✓	✓
	Dimensions (mm) H x W x D	80 x 75 x 75	80 x 105 x 54	90 x 140 x 53	124 x 214 x 52

- 3 Phase
- High accuracy
- Plug and Play
- Daisy-chain power

- 3 Phase
- High accuracy
- Plug and Play
- Daisy-chain power

Single Phase Current Transformers	RI-CT050	RI-CT060	RI-CT070	RI-CT080	RI-CT090	RI-CT100	RI-CT110	RI-CT120	
									
	Primary Current	40...300A	100...500A	100...800A	250...1250A	400...1600A	400...2000A	400...2000A	150...2000A
	Secondary Current	5A or 1A	5A or 1A	5A or 1A	5A or 1A	5A or 1A	5A or 1A	5A or 1A	5A or 1A
	Cable Diameter	Ø 21mm	Ø 24mm	Ø 28mm	Ø 40mm	Ø 45mm	—	Ø 60mm	—
	Busbar Aperture	—	20 x 20mm or 30 x 10mm	40 x 10mm or 30 x 12mm	50 x 10mm or 40 x 30mm	60 x 15mm or 50 x 30mm	60 x 30mm	60 x 30mm or 80 x 10mm or 50 x 50mm	65 x 32mm
	DIN Rail Mount	Supplied	Supplied	Supplied	Supplied	—	—	—	—
	Foot Mount	Push in	Push in	Push in	Push in	Push in	Push in	Push in	—
	Busbar Mount	—	✓	✓	✓	✓	✓	✓	✓
	Sealable Terminal Cover	✓	✓	✓	✓	✓	✓	✓	✓
Dims. (mm) H x W x D	65 x 44 x 30	70 x 49 x 30	78 x 60 x 30	95 x 70 x 40	111 x 85 x 30	126 x 90 x 45	124 x 100 x 40	111 x 90 x 40	

Split Core Current Transformers	RI-CTS010	RI-CTS016	RI-CTS024	RI-CTS036	RI-CTS58MT	RI-CTS230	RI-CTS580	
								
	Primary Current	5...75A	50...160A	100...300A	250...630A	Multi Ratio 200, 400, 600, 800, 1000A	100...400A	200...1000A
	Secondary Current	.333mV	.333mV	5A or 1A	5A or 1A	5A or 1A	5A or 1A	5A or 1A
	Cable Diameter	Ø 10mm	Ø 16mm	Ø 24mm	Ø 36mm	Ø 63mm	—	—
	Busbar Aperture	—	—	—	—	—	20 x 30mm	50 x 80mm
	Foot Mount	—	—	—	—	—	Push in	Push in
	Busbar Mount	—	—	—	—	—	—	✓
	Sealable Terminal Cover	—	—	—	—	—	✓	✓
	Dims. (mm) H x W x D	40.5 x 25.5 x 26	44.5 x 32 x 31	66.5 x 50.5 x 41	84 x 57.5 x 42	123 x 133 x 37	109 x 89 x 40	145 x 115 x 51

RI-CT120H	RI-CT130	RI-CT130H	RI-CT140	RI-CT140H	RI-CT150	RI-CT150H	RI-CT160	RI-CT160H
								
150...2000A 5A or 1A —	150...2500A 5A or 1A —	150...2500A 5A or 1A —	200...4000A 5A or 1A —	200...4000A 5A or 1A —	400...4000A 5A or 1A —	400...4000A 5A or 1A —	400...6000A 5A or 1A —	400...6000A 5A or 1A —
65 x 32mm	84 x 34mm	84 x 34mm	105 x 38mm	105 x 38mm	127 x 38mm	127 x 38mm	127 x 54mm	127 x 54mm
— — ✓ ✓	— — ✓ ✓	— — ✓ ✓	— — ✓ ✓	— — ✓ ✓	— — ✓ ✓	— — ✓ ✓	— — ✓ ✓	— — ✓ ✓
107 x 95 x 40	133 x 96 x 40	113 x 116.5 x 40	154 x 96 x 40	113 x 137.5 x 40	176 x 98 x 40	115 x 159.5 x 40	176 x 125 x 40	142 x 159 x 40

RI-CTS880	RI-CTS812	RI-CTS816	RI-CTP010	RI-CTP040
				
250...1000A 5A or 1A —	500...1600A 5A or 1A —	2000...6000A 5A or 1A —	1...40A 5A or 1A —	30...150A 5A or 1A —
80 x 80mm Push in ✓ ✓	80 x 120mm Push in ✓ ✓	80 x 160mm Push in ✓ ✓	— Push in — ✓	— Push in — ✓
154 x 145 x 51	196 x 145 x 52	250 x 186 x 52	80 x 62 x 50	97 x 80 x 44

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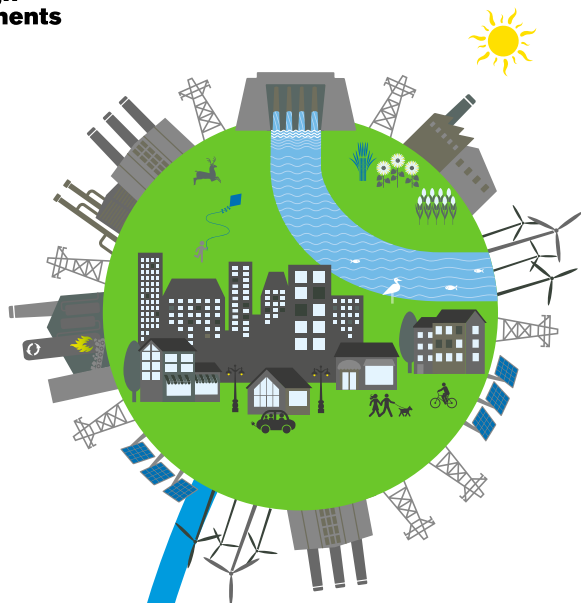


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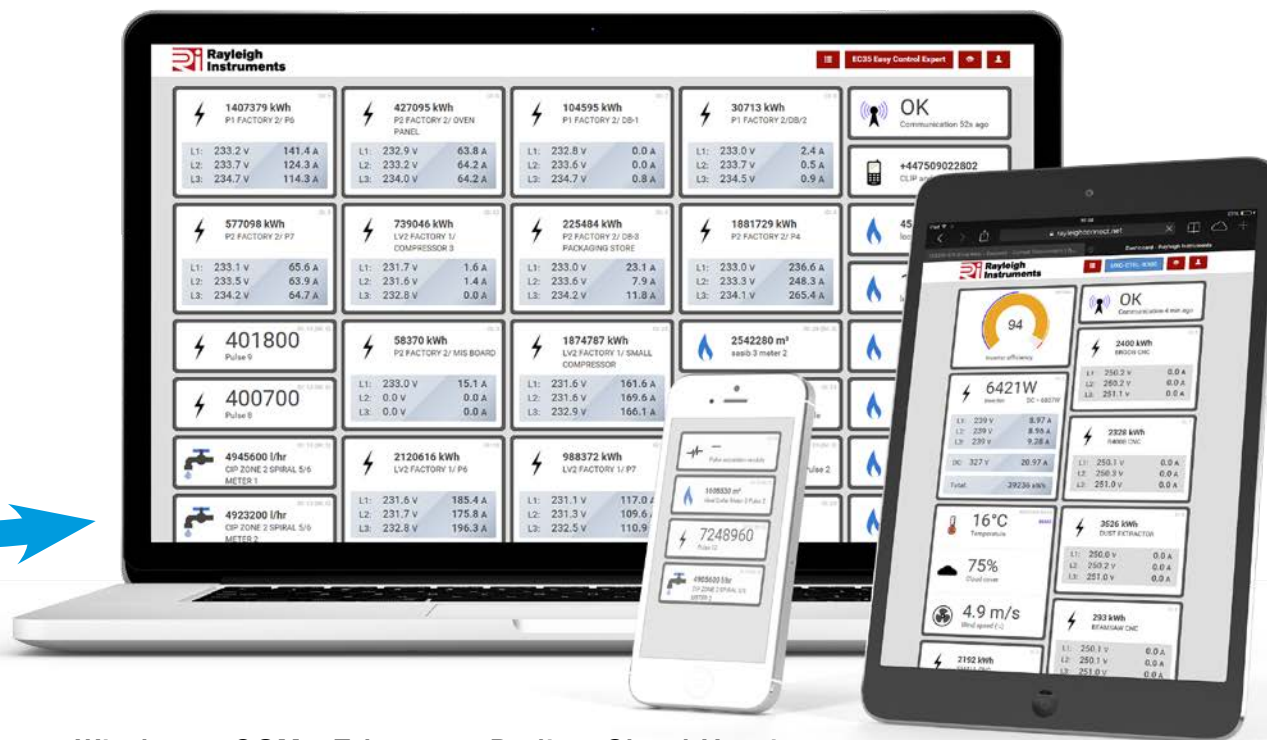
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