

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

150-400 Watts

RTC Series



- PICMG 2.11 Compatible
- AC or DC Input Versions
- Industry Standard
- Power Factor Corrected
- Hot Swap N+1 Redundancy
- Active Current Share
- International Safety Approvals

Specification

Input

Input Voltage	• 90-264 VAC or 36-72 VDC
Input Frequency	• 47-63 Hz
Input Current	• RTC150: 1.8/0.9 A at 115/230 VAC RTC200: 2.2/1.1 A at 115/230 VAC RTC400: 4.8/2.4 A at 115/230 VAC
Inrush Current	• AC: 30 A at 120 VAC, 60 A at 230 VAC DC: 40 A at 48 VDC (80 A for 400 W)
Power Factor	• 0.99 typical
Earth Leakage Current	• <3 mA
Input Protection	• RTC150/200: 6.3 A fuse RTC400: 8.0 A fuse

Output

Output Voltage	• 4 outputs with 3.3 V, 5 V and ±12 V
Output Voltage Trim	• ±0.25 V on each rail
Initial Set Accuracy	• 3.3 V and 5 V: ±10 mV. ±12 V: ±25 mV
Minimum Load	• No minimum load required
Start Up Delay	• 2 s at 115 VAC
Start Up Rise Time	• <75 ms
Hold Up Time	• 10 ms minimum at full load and 90 VAC
Line Regulation	• ±2% max
Load Regulation	• ±2% max (±3% for V4)
Transient Response	• 5% max. deviation, recovery to within 1% in 500 µs for a 25% load change
Ripple & Noise	• 1% pk-pk, 20MHz BW
Overvoltage Protection	• 110-135% Vnom, recycle input to reset
Overtemperature Protection	• Shuts down at 110 °C, auto recovery, warning signal at 90 °C measured internally
Overload Protection	• RTC150/200: Latching RTC400: Auto recovery
Short Circuit Protection	• Protected to short circuit conditions
Temperature Coefficient	• 0.05% /°C
Remote Sense	• See note 4
Remote Enable	• On = TTL low/short, Off = TTL high/open
Remote Inhibit	• On = TTL high/open, Off = TTL low/short
Current Share	• See note 5
Power Fail	• TTL compatible signal, open collector active low signal. Indicates any output below 90% and/or input below 60 VAC for AC version or 36 VDC for DC version.

General

Efficiency	• 70% typical
Isolation	• 3000 VAC Input to Output 1500 VAC Input to Ground 500 VAC Output to Ground
Switching Frequency	• 135 kHz typical
Power Density	• RTC150: 2.8 W/In^3 RTC200: 3.7 W/In^3 RTC400: 3.6 W/In^3
Signals	• Margining, thermal warning, power fail, enable and inhibit
MTBF	• 100 kHrs per MIL-HDBK-217F

Environmental

Operating Temperature	• 0 °C to +70 °C, derate linearly from 100% power at 50 °C to 50% power at 70 °C
Cooling	• 400 LFM/30 CFM required for full power
Operating Humidity	• 10-95% RH, non-condensing
Storage Temperature	• -40 °C to +85 °C
Operating Altitude	• 3000 m
Shock	• MIL-STD-810D
Vibration	• MIL-STD-810D

EMC & Safety

Emissions	• EN55022, level A conducted and radiated FCC, level A conducted and radiated
Harmonic Currents	• EN61000-3-2
Voltage Flicker	• EN61000-3-3
ESD Immunity	• EN61000-4-2, level 3 Perf Criteria A
Radiated Immunity	• EN61000-4-3, level 3 Perf Criteria A
EFT/Burst	• EN61000-4-4, level 2 Perf Criteria B
Surge	• EN61000-4-5, level 3 Perf Criteria B
Conducted Immunity	• EN61000-4-6 10 V, Perf Criteria A
Dips & Interruptions	• EN61000-4-11, 30% 10 ms, 60% 100 ms, 100% 5000 ms Perf Criteria A, B, B
Safety Approvals	• EN60950, UL60950, CSA22.2 No. 60950 per cUL, CE Mark

Models and Ratings

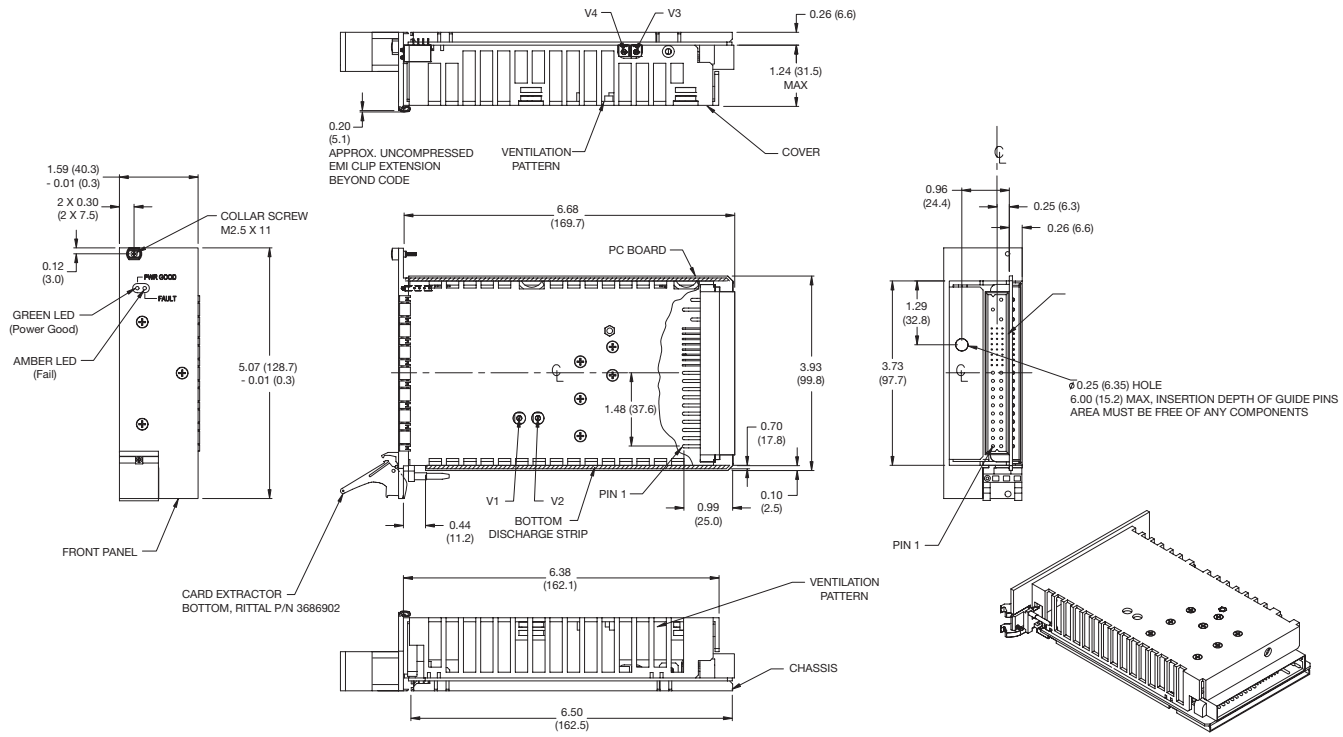
Input Voltage	Output	Output Voltage	Output Current	Regulation		Ripple & Noise Pk-Pk[3]	Model Number
				Line	Load		
90-264	V1	+5.0 V	20.0 A	±2%	±2%	1%	RTC150PM42
	V2	+3.3 V	33.0 A	±2%	±2%	1%	
	V3	+12.0 V	8.0 A	±2%	±2%	1%	
	V4	-12.0 V	1.5 A	±2%	±3%	1%	
36-72 VDC	V1	+5.0 V	20.0 A	±2%	±2%	1%	RTC15048M42
	V2	+3.3 V	33.0 A	±2%	±2%	1%	
	V3	+12.0 V	8.0 A	±2%	±2%	1%	
	V4	-12.0 V	1.5 A	±2%	±3%	1%	

Notes

1. Total maximum output power is 150 W.
2. V1 & V2 output power must not exceed 125 W.
3. Output ripple and noise is measured using 10 µF tantalum and 0.1 µF capacitors across probe.
4. Remote sense compensates for a 0.3 V drop for V1 and V2.
5. Current share to within 10% for up to 6 supplies for V1 and V2.

Mechanical Details

All dimensions are in inches (mm) **Weight:** 1.98 lbs (900 g) **Overall dimensions:** 8HP x 3.93 (99.8) x 6.78 (172.2)



PIN CONNECTIONS - RTC150							
Pin	Pin Length	Signal Name	Description	Pin	Pin Length	Signal Name	Description
1-4	Medium	V1	V1 output	32	Medium	V2 MARGIN	V2 marginate
5-12	Medium	RTN	V1 and V2 return	33	Medium	V2 SENSE	V2 remote sense
13-18	Medium	V2	V2 output	34	Medium	S RTN	Sense return
19	Medium	RTN	V3 return	35	Medium	V1 SHARE	V1 current share
20	Medium	V3	V3 output	36	Medium	RESERVED	Reserved
21	Medium	V4	V4 output	37	Medium	RESERVED	Reserved
22	Medium	RTN	Signal return	38	Medium	TEMP WNG	Thermal warning
23	Medium	RESERVED	Reserved	39	Medium	INH#	Inhibit
24	Medium	RTN	V4 return	40	Medium	RESERVED	Reserved
25	Medium	RESERVED	Reserved	41	Medium	V2 SHARE	V2 current share
26	Medium	RESERVED	Reserved	42	Medium	FAL#	Fail signal
27	Short[1]	EN#	Enable	43	Medium	RESERVED	Reserved
28	Medium	RESERVED	Reserved	44	Medium	RESERVED	Reserved
29	Medium	V1 MARGIN	V1 marginate	45	Long[1]	CGND	Chassis ground
30	Medium	V1 SENSE	V1 remote sense	46	Medium	ACN or +DC IN	+DC input/AC IN neutral
31	Medium	RESERVED	Reserved	47	Medium	ACL or -DC IN	-DC input/AC IN line

Note:
1. Long length pins = first mate last break. Short length pins = last mate first break.

Models and Ratings

Input Voltage	Output	Output Voltage	Output Current	Regulation		Ripple & Noise Pk-Pk[3]	Model Number
				Line	Load		
90-264	V1	+5.0 V	25.0 A	±2%	±2%	1%	RTC200PM42
	V2	+3.3 V	35.0 A	±2%	±2%	1%	
	V3	+12.0 V	8.0 A	±2%	±2%	1%	
	V4	-12.0 V	1.5 A	±2%	±3%	1%	
36-72 VDC	V1	+5.0 V	25.0 A	±2%	±2%	1%	RTC20048M42
	V2	+3.3 V	35.0 A	±2%	±2%	1%	
	V3	+12.0 V	8.0 A	±2%	±2%	1%	
	V4	-12.0 V	1.5 A	±2%	±3%	1%	

Notes

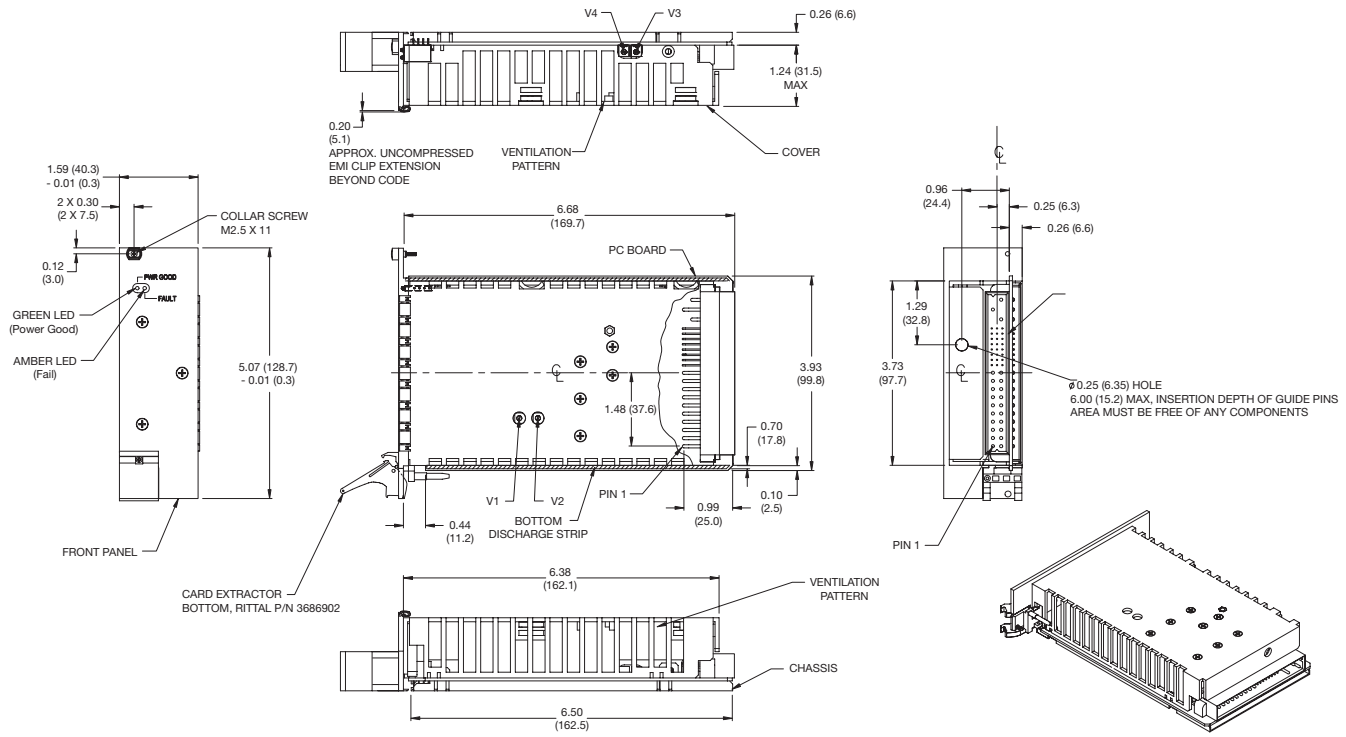
1. Total maximum output power is 200 W.
2. V1 & V2 output power must not exceed 175 W.
3. Output ripple and noise is measured using 10 µF tantalum and 0.1 µF capacitors across probe.
4. Remote sense compensates for a 0.3 V drop for V1 and V2.
5. Current share to within 10% for up to 6 supplies for V1 and V2.

Mechanical Details

All dimensions are in inches (mm)

Weight: 1.98 lbs (900 g)

Overall dimensions: 8HP x 3.93 (99.8) x 6.78 (172.2)



PIN CONNECTIONS - RTC150							
Pin	Pin Length	Signal Name	Description	Pin	Pin Length	Signal Name	Description
1-4	Medium	V1	V1 output	32	Medium	V2 MARGIN	V2 marginate
5-12	Medium	RTN	V1 and V2 return	33	Medium	V2 SENSE	V2 remote sense
13-18	Medium	V2	V2 output	34	Medium	S RTN	Sense return
19	Medium	RTN	V3 return	35	Medium	V1 SHARE	V1 current share
20	Medium	V3	V3 output	36	Medium	RESERVED	Reserved
21	Medium	V4	V4 output	37	Medium	RESERVED	Reserved
22	Medium	RTN	Signal return	38	Medium	TEMP WNG	Thermal warning
23	Medium	RESERVED	Reserved	39	Medium	INH#	Inhibit
24	Medium	RTN	V4 return	40	Medium	RESERVED	Reserved
25	Medium	RESERVED	Reserved	41	Medium	V2 SHARE	V2 current share
26	Medium	RESERVED	Reserved	42	Medium	FAL#	Fail signal
27	Short[1]	EN#	Enable	43	Medium	RESERVED	Reserved
28	Medium	RESERVED	Reserved	44	Medium	RESERVED	Reserved
29	Medium	V1 MARGIN	V1 marginate	45	Long[1]	CGND	Chassis ground
30	Medium	V1 SENSE	V1 remote sense	46	Medium	ACN or +DC IN	+DC input/AC IN neutral
31	Medium	RESERVED	Reserved	47	Medium	ACL or -DC IN	-DC input/AC IN line

Note:
1. Long length pins = first mate last break. Short length pins = last mate first break.

Models and Ratings

RTC400 XP

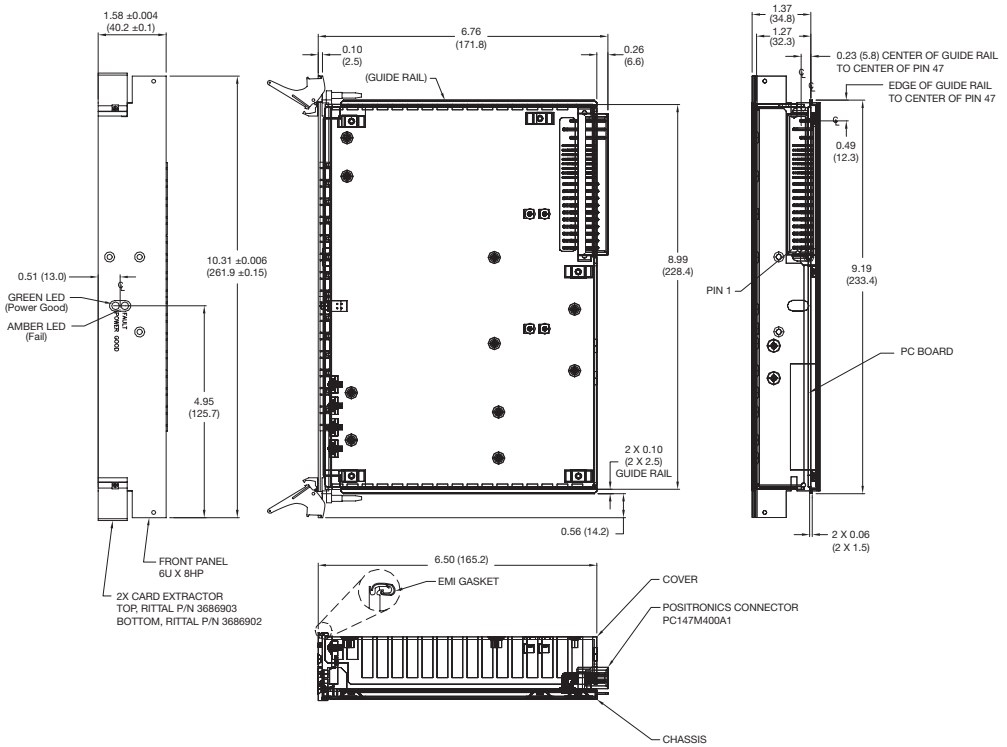
Input Voltage	Output	Output Voltage	Output Current	Regulation		Ripple & Noise Pk-Pk[3]	Model Number
				Line	Load		
90-264	V1	+5.0 V	50.0 A	±2%	±2%	1%	RTC400PM42
	V2	+3.3 V	50.0 A	±2%	±2%	1%	
	V3	+12.0 V	12.0 A	±2%	±2%	1%	
	V4	-12.0 V	4.0 A	±2%	±2%	1%	
36-72 VDC	V1	+5.0 V	50.0 A	±2%	±2%	1%	RTC40048M42
	V2	+3.3 V	50.0 A	±2%	±2%	1%	
	V3	+12.0 V	12.0 A	±2%	±2%	1%	
	V4	-12.0 V	4.0 A	±2%	±2%	1%	

Notes

1. *Total maximum output power is 400 W.*
2. *V1 & V2 combined current must not exceed 65 A.*
3. *Output ripple and noise is measured using 10 µF tantalum and 0.1 µF capacitors across probe.*
4. *Remote sense compensates for a 0.5 V drop for V1, V2 and V3.*
5. *Current share to within 10% for up to 6 supplies for V1, V2 and V3.*

Mechanical Details

All dimensions are in inches (mm) **Weight:** 3.97 lbs (1.8 kg) **Overall dimensions:** 1.59 (40.3) x 6.86 (174.3) x 9.19 (233.4)



PIN CONNECTIONS - RTC150							
Pin	Pin Length	Signal Name	Description	Pin	Pin Length	Signal Name	Description
1-4	Medium	V1	V1 output	32	Medium	V2 MARGIN	V2 marginate
5-12	Medium	RTN	V1 and V2 return	33	Medium	V2 SENSE	V2 remote sense
13-18	Medium	V2	V2 output	34	Medium	S RTN	Sense return
19	Medium	RTN	V3 return	35	Medium	V1 SHARE	V1 current share
20	Medium	V3	V3 output	36	Medium	V3 SENSE	V3 remote sense
21	Medium	V4	V4 output	37	Medium	RESERVED	Reserved
22	Medium	RTN	Signal return	38	Medium	TEMP WNG	Thermal warning
23	Medium	RESERVED	Reserved	39	Medium	INH#	Inhibit
24	Medium	RTN	V4 return	40	Medium	RESERVED	Reserved
25	Medium	RESERVED	Reserved	41	Medium	V2 SHARE	V2 current share
26	Medium	RESERVED	Reserved	42	Medium	FAL#	Fail signal
27	Short[1]	EN#	Enable	43	Medium	RESERVED	Reserved
28	Medium	RESERVED	Reserved	44	Medium	V3 SHARE	V3 current share
29	Medium	V1 MARGIN	V1 marginate	45	Long[1]	CGND	Chassis ground
30	Medium	V1 SENSE	V1 remote sense	46	Medium	ACN or +DC IN	+DC input/AC IN neutral
31	Medium	RESERVED	Reserved	47	Medium	ACL or -DC IN	-DC input/AC IN line

Note:
1. Long length pins = first mate last break. Short length pins = last mate first break.

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP