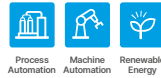


Cliq[®] Redundancy Module



- Wide input and output range of 22-60 V_{DC}
- Very wide operating temperature from -40°C to +80°C
- Built-in 2 channel DC OK signal and alarm relay contact
- Support N+1 Redundancy connection
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2
- IP20 Certified

Applications



Output	DRR-20□	DRR-40□
Output Current	Normal mode = 0-20Amps; Short Circuit or Overload = 25Amps max	Normal mode = 0-40Amps; Short Circuit or Overload = 50Amps max
Voltage Drop (V _{in} - V _{out})	Typical 0.65 V	
Input		
Input Voltage Range	22-60 V _{DC}	
Input Current	(1+1 Redundancy) = Nom. 2 x 12.5 Amps (N+1 Redundancy) = Nom. 2 x 10 Amps (Single use) = Nom. 20 Amps	(1+1 Redundancy) = Nom. 2 x 25 Amps (N+1 Redundancy) = Nom. 2 x 20 Amps (Single use) = Nom. 40 Amps
Mechanical		
Case Cover / Chassis	Aluminium	
Dimensions (H x W x D)	mm	121 x 50 x 122.1
	inch	4.76 x 1.97 x 4.81
Unit Weight	kg	0.38
	lb	0.84
Cooling System	Convection	
LED Indicators	Green LED DC OK: V _{in} 1 and V _{in} 2	
MTBF ¹⁾	> 800,000 hrs	
Environment		
Operating Temperature ²⁾	-40°C to +80°C	
Storage Temperature	-40°C to +85°C	
Operating Humidity	5 to 95% RH (Non-Condensing)	
Operating Altitude	0 to 2,500m (0 to 8,200ft)	

Dimensions Reference



Notes

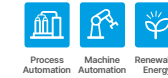
- 1) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 24 V_{DC}, O/P: 100% load) for vertical mounting orientation.
- 2) Refer power de-rating in the product datasheet.
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

Cliq[®] Buffer Module



- Minimum buffering time of:
 - 250 ms @ 24 V / 20 A for DRB-24V020AB□
 - 200 ms @ 24 V / 40 A for DRB-24V040ABN
- Flexible operating buffering voltage modes:
 - Fixed mode at 22 V_{DC}; Dynamic mode for V_{in}-1V
- Support parallel connection to extend buffering time
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2 (DRB-24V020ABA)

Applications



Output	DRB-24V020AB□	DRB-24V040ABN
Output Voltage	24 V _{DC} typ. (Depends on V _{in})	24 V _{DC} typ. (Depends on V _{in})
Output Voltage Range	22-28 V (Switch = "Fix 22 V" buffering starts if terminal voltage falls below 22 V) (Switch = "V _{in} - 1V" buffering starts if terminal voltage is decreased by more than 1 V)	
Output Current	20.0 A Max	40.0 A Max
PARD (20 MHz)	< 200 mVpp, Buffering Mode	< 350 mVpp, Buffering Mode
Buffer Time	250 ms Min @ 24 V / 20 A load, 5 s Min @ 24 V / 1 A load	200 ms Min @ 24 V / 40 A load, 8 s Min @ 24 V / 1 A load
Input		
Input Voltage Range	22.8-28.8 V _{DC}	
Input Current	Charging Mode: < 0.6 A	Charging Mode: < 0.6 A
Input Power	2.5 W average (Standby Mode)	
Charging Time	< 30 s	< 40 s
Polarity Protection	Yes	Yes
Mechanical		
Case Cover / Chassis	Aluminium	
Dimensions (H x W x D)	mm	121 x 70 x 120.1
	inch	4.76 x 2.76 x 4.73
Unit Weight	kg	0.76
	lb	1.68
Cooling System	Convection	
LED Indicators	Green LED	
MTBF ¹⁾	> 800,000 hrs	
Environment		
Operating Temperature ²⁾	-25°C to +75°C	
Storage Temperature	-25°C to +85°C	
Operating Humidity	5 to 95% RH (Non-Condensing)	
Operating Altitude	0 to 2,500m (0 to 8,200 ft)	

Dimensions Reference



Notes

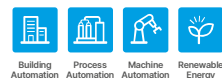
- 1) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 24 V_{DC}, O/P: 100% load) for vertical mounting orientation.
- 2) Refer power de-rating in the product datasheet.
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

cliq" DC-UPS Module



- Full corrosion resistant aluminium casing
- Suitable for 24 V system up to 40 A
- Built-in diagnostic monitoring for DC OK, Discharge and Battery Fail by relay contacts
- LED indicator for DC OK, Battery Charging, Battery Discharging, Battery Fail and Battery Reverse Polarity
- High MTBF > 500,000 hrs per Telcordia SR-332
- Conformal coating option on PCBAs to protect against common dust and chemical pollutants

Applications



Output	DRU-24V40ABN	
Output Voltage Range	23-28 V _{DC}	
Output Current	40.0 A Max	
Output Power	960 W Max	
Input		
Input Voltage Range	24-28 V _{DC}	
Input Current	Charging Mode: 2.0 A ± 1.0 A	
Charging Time	< 3 hr ± 1 hr (for battery 24 V/15 AH)	
Efficiency	Charging Mode: > 70.0% Buffering Mode: > 99.0%	
Mechanical		
Case Cover / Chassis	Aluminium	
Dimensions (H × W × D)	mm	121 × 50 × 117.3
	inch	4.76 × 1.97 × 4.62
Unit Weight	kg	0.60
	lb	1.32
Cooling System	Convection	
LED Indicators	Green LED Orange LED Red LED	
MTBF ¹⁾	> 500,000 hrs	
Environment		
Operating Temperature ²⁾	-20°C to +60°C	
Storage Temperature	-40°C to +85°C	
Operating Humidity	5 to 95% RH (Non-Condensing)	
Operating Altitude	0 to 3,000 m (0 to 9,840 ft)	

Dimensions Reference



Notes

- 1) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 24 V_{DC}, O/P: 100% load) for vertical mounting orientation.
- 2) Refer power de-rating in the product datasheet.
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

CHROME DC-UPS Module



- Suitable for 24 V system up to 10 A
- Zero switch over time from loss of DC input to battery operation
- Built-in diagnostic monitoring for DC OK, Discharge and Battery Fail by relay contacts
- Full power for the entire temperature range from -20°C to +60°C
- LED indicator for DC OK, Battery Charging, Battery Discharging, Battery Fail and Battery Reverse Polarity
- High MTBF > 500,000 hrs as per Telcordia SR-332

Applications



Output	DRU-24V10ACZ	
Output Voltage Range	23-28 V _{DC}	
Output Current	10.0 A Max	
Output Power	240 W Max	
Input		
Input Voltage Range	24-28 V _{DC}	
Input Current	Charging Mode: 0.5 A ± 0.1 A	
Charging Time	< 30 hr ± 5 hr (for battery 24 V/12 AH)	
Efficiency	Charging Mode: > 80.0% Buffering Mode: > 99.0%	
Mechanical		
Case Cover / Chassis	Plastic	
Dimensions (H × W × D)	mm	91 × 71 × 55.6
	inch	3.58 × 2.80 × 2.19
Unit Weight	kg	0.14
	lb	0.31
Cooling System	Convection	
LED Indicators	Green LED Orange LED Red LED	
MTBF ¹⁾	> 500,000 hrs	
Environment		
Operating Temperature ²⁾	-20°C to +60°C	
Storage Temperature	-40°C to +85°C	
Operating Humidity	5 to 95% RH (Non-Condensing)	
Operating Altitude	0 to 3,000 m (0 to 9,840 ft)	

Dimensions Reference



Notes

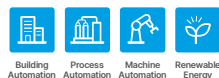
- 1) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 24 V_{DC}, O/P: 100% load) for vertical mounting orientation.
- 2) Refer power de-rating in the product datasheet.
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

CLIQ^M DC-UPS Module



- Full corrosion resistant aluminium casing
- Selectable Charging Current
- Selectable Buffering Time to prevent battery over discharge
- Battery temperature protection to extend battery life
- Conformal coating on PCBAs to protect against common dust and chemical pollutants

Applications



	NEW		NEW	NEW
Output	DRU-24V10AMN		DRU-24V20AMN	DRU-24V40AMN
Output Voltage Range	17.5-29.5 V _{DC}		17.5-29.5 V _{DC}	17.5-29.5 V _{DC}
Output Current	10.0 A Max		20.0 A Max	40.0 A Max
Output Power	240 W Max		480 W Max	960 W Max
Input				
Input Voltage Range			18-30 V _{DC}	
Input Current	0.5 A, 1 A, 1.5 A, 2 A (typ.) (constant current)		0.75 A, 1.5 A, 2.25 A, 3 A (typ.) (constant current)	1 A, 2 A, 3 A, 4 A (typ.) (constant current)
Charging Time	< 9 hr ± 1 hr (2 A charging current for 24 V/12 AH battery)		< 6 hr ± 1 hr (3 A charging current for 24 V/12 AH battery)	< 4.5 hr ± 1 hr (4 A charging current for 24 V/12 AH battery)
Efficiency			Normal Operation: 98% typ.	
Mechanical				
Case Cover / Chassis			Aluminium	
Dimensions (H × W × D)	mm	124 × 38 × 117	124 × 38 × 117	124 × 50 × 117
	inch	4.88 × 1.50 × 4.61	4.88 × 1.50 × 4.61	4.88 × 1.97 × 4.61
Unit Weight	kg	0.52	0.53	0.66
	lb	1.15	1.17	1.46
Cooling System			Convection	
LED Indicators ¹⁾			Green LED Red LED Orange LED	
MTBF ²⁾			> 500,000 hrs	
Environment				
Operating Temperature ¹⁾			-30°C to +70°C	
Storage Temperature			-40°C to +85°C	
Operating Humidity			5 to 95% RH (Non-Condensing)	
Operating Altitude ³⁾			0 to 6,000 m (0 to 19,680 ft)	

Dimensions Reference



Notes

- 1) Refer LED indicator status and power de-rating in the product datasheet.
- 2) MTBF as per Telcordia SR-332.
- 3) Approvals apply only up to 5,000m (16,400ft).
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

CLIQ^M Battery Module



- Anti-corrosion powder coated chassis
- Suitable for 7.2 AH Lead-Acid battery
- Built-in battery voltage LED indicator
- Built-in battery over temperature protection (need to be used with the CLIQ M DC-UPS modules)

Applications



	NEW	
Battery	DRN-24V7AAEN	
Nominal Battery Voltage	24 V _{DC} , SLA Sealed lead acid battery 2 x 12 V _{DC} , SLA Sealed lead acid battery	
Battery Capability	7.2 AH lead-acid battery	
Recommended Charging Voltage	27.6 V _{DC}	
Battery Current		
Charging Current ¹⁾	2.1 A Max	
Discharging Current	40 A Max	
Battery Fuse	2 pcs in parallel	
Mechanical		
Case Chassis	Metal	
Dimensions (H × W × D)	mm	211.5 × 148 × 109.2
	inch	8.33 × 5.83 × 4.30
Unit Weight	kg	1.40
	lb	3.09
Cooling System	Convection	
LED Indicators	Green LED	
Environment		
Operating Temperature	Charging	0°C to +40°C
	Discharging	-10°C to +50°C
Storage Temperature	-15°C to +40°C	
Operating Humidity	5 to 95% RH (Non-Condensing)	
Operating Altitude	0 to 6,000 m (0 to 19,680 ft)	

Dimensions Reference



Notes

- 1) Cannot exceed max charging current limitation of battery specification.
- 2) All parameters are specified at 25°C ambient temperature unless otherwise indicated.