SHARYS MICRO and *MINI*

from 30 to 200 A

19” integrable 48 VDC power subrack

The solution for

- Telecommunications
- Transmission systems
- Telephone exchanges

SHARYS MICRO
Example: 100 A subrack with controller and 2 rectifier modules

SHARYS MINI
Example: 200 A subrack with controller and 4 rectifier modules

Specifically designed for Telecom application, ***SHARYS*** series combine all telecom features such as modularity, hot-swap module replacements, redundancy N+1 and scalability together with a robust power module design.

Upgradeability

- Expandable according to future requirements by adding additional rectifier modules.

Reliability & Robustness

- Microprocessor control.
- Intelligent rectifier cooling.
- Battery safe thanks to the End of discharge protection (option).
- Limited thermal stress and longer life of the components.

Total Costs of Ownership

- High efficiency up to 92%: low energy consumption, low heat dissipation.
- Sinusoidal current absorption with Power factor close to one.
- Process continuity with hot-swap capabilities (replacement of modules without any power interruption).

SHARYS MICRO and *MINI*

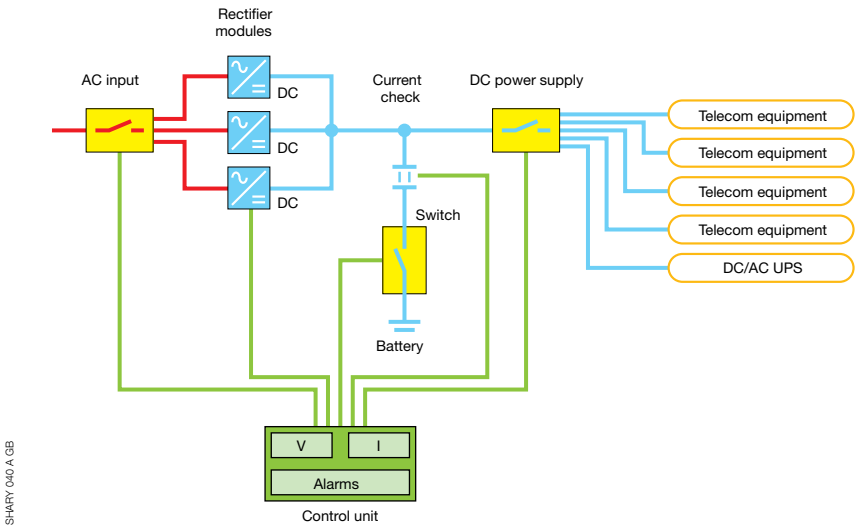
SHARYS MICRO and ***MINI*** is a DC power solution consisting of complete compact subracks including rectifier modules and related power distribution units.

SHARYS MICRO can be fitted with a maximum of 2 ***SHARYS*** rectifier modules to achieve up to 4.8 kW (100 A) effective power installed.

SHARYS MINI can be fitted with a maximum of 4 ***SHARYS*** rectifier modules to achieve up to 9.6 kW (200 A) effective power installed.

socomec Innovative Power Solutions UPS

Block diagram



SHARY 040 A GB

Technical data

	SHARYS MICRO and ***MINI*** - RECTIFIER MODULE	
Reference	SH 1600W	SH 2700W
INPUT		
Rated voltage	230 VAC 1ph+N	
Voltage tolerance(1)	+20% -40%	
Rated frequency	from 47.5 to 63 Hz	
Power factor	≥ 0.99 (nominal conditions)	
Current distortion	compliant with IEC61000-3-2 (EN60555-2)	
OUTPUT		
Rated voltage	48 VDC (45-58 VDC)	
Ripple in all conditions and without batteries	< 50 mVrms, < 100 mVpp, < 1 mVps	
Maximum power	1600 W	2700 W
Rated current	30 A	50 A
EFFICIENCY		
Typical	up to 0.91	up to 0.92
ENVIRONMENT		
Operating ambient temperature	-5 °C to + 45 °C (without derating), up to +55 °C with power derating	
Relative humidity	10% to 90%	
Cooling	forced with intelligent fan speed control	
STANDARDS		
Safety	EN 60950	
EMC emission	complies with EN 50081-2	
EMC immunity	complies with EN 61000-4-6 (EN50082-2), EN 61000-4-3, ETSI EN 300÷386 v1.3.1	

	SHARYS MICRO		***SHARYS MINI***	
Reference	MC 60	MC 100	MN 120	MN 200
Rectifier type	SH 1600W	SH 2700W	SH 1600W	SH 2700W
INPUT				
Rated voltage	230 VAC 1ph+N		400 VAC 3ph+N / 230 VAC 1ph+N	
Voltage tolerance(1)	+20% -40%			
Rated frequency	from 47.5 to 63 Hz			
OUTPUT				
Rated voltage	48 VDC (45-58 VDC)			
Rated current(2)	60 A	100 A	120 A	200 A
RECTIFIER CABINET				
Dimensions W x D x H	19" x 500 x 262 mm (6U)		19" x 500 x 524 mm (12U)	
Weight	up to 30 kg(2)		up to 52 kg(2)	
Degree of protection	IP20 (with modules inserted)			
Colours	RAL 7012			

(1) Power derating from -20% up to -40%.
(2) With complete rectifier configuration.

SHARYS PLUS control module

The ***SHARYS PLUS*** advanced control and monitoring module is included as standard on all ***SHARYS DC*** systems. A 32-digit LCD display provides easy and fast access to all information parameter settings.

- Microprocessor control with CAN-BUS protocol communication and RS232/485 port for external communication.
- Additional easy frontal LEDs indications.
- Plug-in «hot-swap» solution, easy to replace.

Rectifier modules

SHARYS rectifier modules use double conversion switching technology.
The combination of SMD technology, of digital microprocessor control and of IGBT components result in a highly reliable and efficient rectifier.

- Plug-in “hot-swap”.
- Microprocessor control with CAN-BUS protocol communication.
- Parallel connection with active load sharing and selective disconnection of a faulty module.
- Wide temperature and input mains voltage tolerance.

Standard electrical features

- Positive pole grounded.
- Internal battery fuse protection.
- Fitting for output DC distribution.
- Battery temperature sensor.

Electrical options

- BLVD Battery Low Voltage Disconnector.
- Output distribution.
- Double battery protection.

Standard communication features

- ***SHARYS PLUS*** advanced digital controller.
- MODBUS/JBUS RTU.
- 1 slot for communication options.

Communication options

- ***NET VISION*** for DC systems: professional WEB/ SNMP interface for DC system monitoring and shutdown management of several operating systems.
- Dry-contact interface.