

# Power

## CSM35

Modular DC to DC Converter



- 48 input,  $\pm 137\text{VDC}$  100VA/outputs
- Up to 2400W per 19" shelf, 3000W per 23" shelf
- Remote equipment powering over multiple copper pairs
- 3RU high-density modules
- Two 100VA circuits per power module
- Scalable hot plug-in operation

The CSM35 is a compact, modular DC to DC converter system designed for distributed power communications applications, specifically optical network units. Using switched mode technology, the CSM35 provides outstanding efficiency in a compact design.

The CSM35 packs maximum power into minimum space, but doesn't compromise on features. A fully equipped CSM35 system will include up to 12 modules in a 19" shelf, or 15 modules in a 23" shelf.

Argus' CSM modular DC to DC converter systems incorporate a full range of standard and optional features, including current/power limiting and individual ground fault interrupt options for each circuit.

## CSM35 Modular DC to DC Converter

### Power Module(s)

#### Electrical

Input voltage:	-40 to -60VDC
Output voltage:	±137VDC
Power:	90VA minimum per output
Efficiency:	>88% (50 to 100% load) 90% typical
Regulation:	<-0.5% no load to full load <±0.05% line

#### Noise:

Wide band:	<300mVp-p to 100MHz <100mVRMS to 10MHz
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Acoustic:	<60dBa @ 1m (3ft)
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#### Mechanical

##### Power module

Dimensions	
mm:	114H x 31.75W x 254D
inches:	4.5H x 1.25W x 10D

#### Features

Indicators:	Power on DC input OK Converter fail alarm major Converter fail alarm minor Current limit
Protection:	Power limiting Input/output fuses Input inrush current limiting Output transient and OSP Input high and low voltage shutdown Current limit/short circuit fold back Thermal shutdown Input transient 5mA ground fault interrupt option

### Environmental

Temperature:	
Optional:	-40 to 65°C (-40 to 149°F)*
Humidity:	0 to 95% RH non-condensing
Elevation:	-500 to 2800m (-1640 to 9186ft)

\* Fan module required for high temp operation above 50°C (122°F)

### Shelves

#### Mechanical

<b>19" shelf (12 modules)</b>	
Weight:	11.4kg (25lb) Fully equipped
Dimensions	
mm:	132H x 432W x 314D
inches:	5.2H x 17W x 12.36D

#### **23" shelf (15 modules)**

Weight:	13.9kg (30lb) Fully equipped
Dimensions	
mm:	132H x 533W x 314D
inches:	5.2H x 21W x 12.36D
Shelf cooling:	Fan module option available
Alarm module:	Minor fail Major fail Power on Form C relay minor Form C relay major

### Standards

CSA:	C22.2 60950-1 (NRTL/C)
UL:	60950-1 (NRTL)
FCC:	47 CFR part 15 Class B radiated EMI Class A conducted EMI
EN:	55022 (CISPR 22) Class B radiated EMI Class A conducted EMI 61000-4-2, -3, -4, -6 60950 (CE)
Bellcore:	GR-63-CORE GR-1089-CORE GR-1089 Class A2 (with GFI) or A3 (Consult factory on system application)
NEBS:	