



- 19" plug-in module
- Input: DG 4120: 8.5 - 36 VDC, DG 4150 and DG 4150R: 36 - 76 VDC
- DG 4150R: For redundancy operation, Hot-plug
- EMC Standards EN 50081-1 and EN 50082-2
- All outputs permanent short-circuit proof
- Output SELV according to EN 60950
- Primary/secondary overvoltage protection
- Overtemperature protection
- Control inputs: ENABLE, INHIBIT
- Signal outputs: DERATE
- Assembly kit for DIN-rail or wall mounting



Front panel: 12TE - 60.6  
 Handle width: 3TE

ORDER DATA										<i>Order numbers in italics</i>
Vo1 V	Io1 A	Vo2 V	Io2 A	Vo3 V	Io3 A	Vo4 V	Io4 A	Width TE	Height HE	Type No.
+5.1	0 - 14	+3.3	0 - 14	+12	0 - 2	-12	0 - 1	12	3	<b>DG4120-1/2G</b> <i>15.9440.200</i>
+5.1	0 - 14	+3.3	0 - 14	+12	0 - 2	-12	0 - 1	12	3	<b>DG4150-3G</b> <i>15.9440.300</i>
+5.1	0 - 14	+3.3	0 - 14	+12	0 - 2	-12	0 - 1	12	3	<b>DG4150R-3G</b> <i>15.9440.400</i>

Total output: You can take 120W max. from the device (at DG4150: 150W max. with forced ventilation)

Additionally:

Front panel (nature anodized)	33.1594.000.011
Assembly kit for DIN-rail	15.7140.000.190
Assembly kit for wall mounting	15.7140.000.290

**DC / DC POWER SUPPLY for CompactPCI  
WITH GALVANIC INSULATION  
QUADRUPLE OUTPUT  
DG 4120, DG 4150, DG 4150R SERIES**

INPUT		SAFETY																																						
Input voltage range	DG 4120: DC 8.5 - 36 V DG 4150 and DG 4150R: DC 36 - 76 V	EN 60950 / VDE 0805 Safety Class I, VDE 0100																																						
Efficiency	78 - 82% (depending on type)	<b>OPERATING DATA</b>																																						
Input current limitation	≤ 35 A <sub>peak</sub> typ. – in cold state ≤ 60 A <sub>peak</sub> typ. – in hot state	Temperature range	0...+70°C, at free convection																																					
Fuse	25 A	Derating	2% / K at +50°C																																					
<b>OUTPUT</b>		Weight	1.0 kg																																					
Adjustment range Vo1, Vo2	±5%	<b>Ventilation from bottom to top of the power supply and the housing-specific heatradiation must not be obstructed when installing the power supply. Ensure fire protection by means of the surrounding housing system. In general, kindly refer to the MGV user instructions before use.</b>																																						
Operation indicator	Green LED for Vo1, Vo2, Vo3, Vo4	<b>MECHANICS</b>																																						
Ripple	Vo1, Vo2 < 50 mV <sub>pp</sub> , Vo3, Vo4 < 30 mV <sub>pp</sub>	Dimensions	19" plug-in module according to DIN 41494 Part 5																																					
Noise voltage	50 mV <sub>pp</sub> typ. (band width 20 MHz)	Connection	Connector M24/8 / DIN 41612																																					
Temperature coefficient	0.025% / K	<b>PIN CONNECTIONS</b>																																						
Switch on/switch off performance	No overshooting of Vo (soft-start)	13	14	15	16	17	18	19	20																															
Rise delay time	< 0.5 s (DG 4150R: < 1 s)	1)	INH	1)	OVF*	+5VF*	+3.3VL	+12VL	-12VL	A																														
Run-up time	≤ 50 ms (Vo1, Vo2: < 10 ms)	+3.3VL	+3.3VL	+3.3VL	+3.3VL	+3.3VL	+3.3VL	+12VL	-12VL	B																														
<b>REGULATION</b>		EN	DEG	1)	+3.3VL	+3.3VL	+3.3VL	+12VL	-12VL	C																														
Line regulation	< 0.2% for Vo1, Vo2 < 0.5% for Vo3, Vo4	<b>* not with DG 4150R</b>																																						
Load regulation	< 0.1% for Vo1 (< 1% for DG 4150R) < 1% for Vo2 < 5% for Vo3, Vo4	<b>1) internally connected</b>																																						
Response time	< 0.5 ms at Io 20 - 80%	<table border="1"> <tr> <td>2</td> <td>5</td> <td>11</td> <td>13</td> <td>.....</td> <td>20</td> <td>22</td> <td>25</td> </tr> <tr> <td>●</td> <td>●</td> <td>○</td> <td>●</td> <td>□□□□□□□□</td> <td>□□□□□□□□</td> <td>●</td> <td>●</td> <td>○</td> <td>○</td> </tr> <tr> <td>+Ue</td> <td>-Ue</td> <td>PE</td> <td colspan="4"></td> <td>+5VL</td> <td>OVL</td> <td colspan="2"></td> </tr> </table>										2	5	11	13	.....	20	22	25	●	●	○	●	□□□□□□□□	□□□□□□□□	●	●	○	○	+Ue	-Ue	PE					+5VL	OVL		
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+Ue	-Ue	PE					+5VL	OVL																																
<b>PROTECTION AND CONTROLLING</b>		<b>EXPLANATION</b>																																						
Overvoltage protection	125% ±5% for Vo1, Vo2 125% ±10% for Vo3, Vo4 automatically repeating	PE ⊕ Protective conductor <b>Do not use supply without PE-connection!</b>																																						
Current limitation	typ. 110% I <sub>nominal</sub> for Vo1, Vo2 typ. 140% I <sub>nominal</sub> for Vo3, Vo4 Outputs permanent short-circuit proof	Ue Input																																						
Overtemperature protection	Switches off when inside temperature becomes too high, switches on again with hysteresis.	L Load connection (Pin 13 ..... 20 max. 2 A for each contact)																																						
Signal DEG (Derate)	Open-Collector, I <sub>max</sub> = 48 mA Low during start-up of Vo, High 100 - 200 ms after start-up of Vo, Low ≥ 1 ms before break-down of Vo, (mains failure/switch-off with EN / INH)	F Sense connection (not with DG 4150R)																																						
Input EN (Enable)	Power is "on" only if EN is Low (TTL)	OVL Common ground for Vo1, Vo2, Vo3, Vo4																																						
Input INH (Inhibit)	Power is always "off" if INH is Low (TTL) Residual voltage at "off": Vo1 ≤ 1.0 V Vo2 ≤ 0.3 V Vo3, Vo4 ≤ 2.0 V	<b>For a safe operating mode of the device, it is mandatory to connect +5VL with +5VF and OVL with OVF. Maximum voltage compensation of 0.25 V of each line. (not with DG 4150R)</b>																																						
<b>EMC</b>																																								
Interference suppression/ interference immunity	EN 50082-2: 1997 EN 61000-4-2 Intensity 4 EN 61000-4-3 Noise level 10 V/m EN 61000-4-4 Intensity 3/4 EN 61000-4-5 Intensity 4 EN 61000-4-11 VDE 0160 (with switch-off and restart)																																							
Interference emission	EN 50081-1: 1992 EN 55011 / EN 55022 Class B, interference transmission depends on assembly																																							

