

# RFL® GARD 8000® 3U - Ordering Information

	Front Slots 4 - 3 (-Select 2 Functions-)	Rear Slots 1 through 4 (-Select 4 I/O-)						
Product Smart Number >> <b>GARD 3U</b>		Front Slot 4	Front Slot 3	Rear Slot 1	Rear Slot 2	Rear Slot 3	Rear Slot 4	
<b>Front Panel Touch Screen Display</b>								
None	0							
Yes	TSD							
Yes with Stylus Tether	TSDT							
<b>Front Panel Test Switch</b>								
None	0							
With Audio Tone Test Jacks	TA							
Standard	TD							
<b>Primary Power Supply Voltage Input</b>								
24 VDC	24							
48 VDC	48							
125 VDC or 120 VAC	125							
250 VDC	250							
<b>Redundant Power Supply Voltage Input</b>								
None	0							
24 VDC	24							
48 VDC	48							
125 VDC or 120 VAC	125							
250 VDC	250							
<b>Power Supply Interface</b>								
With Multiprotocol (RS-449, V.35, X.21) Digital I/O	MP							
With Multiprotocol (RS-449, V.35, X.21) Digital I/O & No Power Switch	MN							
With G.703 Digital I/O	G7							
With Double Pole Switched Battery Output	DP							
With Multiprotocol (RS-449, V.35, X.21) Digital I/O & Ext PLC Amp Sw Battery	SP							
<b>Front System Display Module</b>								
With Standard Digital Teleprotection Functionality	TP							
With 96-Bit Digital Teleprotection Functionality	96							
With RFL® 9745 Compatible Digital Teleprotection Functionality	97							
Without Digital Teleprotection Functionality	No							
<b>Redundant Controller</b>								
No	0							
<b>System I/O Ethernet Port Type</b>								
Electrical	E							
Fiber Optic	F							
<b>GPS for System Clock Synchronization</b>								
Yes	G							
No	0							
<b>Front Functional Modules (Select Eight with 6U and Two with 3U)</b>								
Distance Line Protection Relay	D							
Current Differential Line Protection Relay	C							
Current Differential Line Protection Relay - Breaker and a Half	B & X (uses two slots)						Consumes two rear slots in corresponding slot number	
Power Line Carrier FSK or On/Off (50 Ohms) w/CLI Meter	P5 & 0 (uses two slots)						Consumes two rear slots in corresponding slot number	
Power Line Carrier FSK or On/Off (75 Ohms) w/CLI Meter	P7 & 0 (uses two slots)						Consumes two rear slots in corresponding slot number	
TX Only Power Line Carrier FSK (50 Ohms)	T5 & 0 (uses two slots)						Consumes two rear slots in corresponding slot number	
TX Only Power Line Carrier FSK (75 Ohms)	T7 & 0 (uses two slots)						Consumes two rear slots in corresponding slot number	
RX Only Power Line Carrier FSK (50/75 Ohms) w/CLI Meter	PR & 0 (uses two slots)						Consumes two rear slots in corresponding slot number	
Power Line Carrier FSK or On/Off - No Hybrid (50 Ohms) w/CLI Meter	PN & 0 (uses two slots)						Consumes two rear slots in corresponding slot number	
Power Line Carrier for External Power Amp	PX & 0 (uses two slots)						Consumes two rear slots in corresponding slot number	
Standard Digital Teleprotection	TP							
RFL® 9745 Compatible Digital Teleprotection	97							
Metering Module	M							
96-Bit Digital Teleprotection	96							
Empty	0							
<b>Rear I/O Terminal Block Type</b>								
Screw	S							
Compression	C							
<b>Rear I/O Modules (Select Ten with 6U and Four with 3U)</b>								
Occupied Slot Based On Front Module Selection							X	
Empty							0	
IEC 68150 GOOSE Module							ET	
8 Channel Telemetry Module							TM	
<b>Audio Tone Teleprotection</b>								
Audio Tone Teleprotection with 16-bit Status and Data I/O							AU	
<b>Digital Communications Modules and Discrete I/O</b>								
	With Discrete I/O >>	None	Input	Red. Input	SS Out	Relay Out	Latch Out	Relay Form C
T1/E1 (DB15/RJ48)		T0	TI	TD	TS	TR	TL	TC
E1 (BNC 50 or 75 ohm)		E0	EI	ED	ES	ER	EL	EC
Multiprotocol (RS-449, V.35, X.21)		M0	MI	MD	MS	MR	ML	MC
G.703 (DB15)		G0	GI	GD	GS	GR	GL	GC
Dual RS-232 (for pass-thru only)		A0	AI	AD	AS	AR	AL	AC
Short Haul Fiber C37.94, 820nm LED Multimode (ST)		H0	HI	HD	HS	HR	HL	HC
Long Haul Fiber, 1300nm LED Singlemode/Multimode (ST)		F0	FI	FD	FS	FR	FL	FC
Long Haul Fiber, 1300nm LASER Singlemode (ST)		30	3I	3D	3S	3R	3L	3C
Long Haul Fiber, 1550nm LASER Singlemode (ST)		50	5I	5D	5S	5R	5L	5C
<b>Discrete I/O Units</b>								
6 Inputs								IE
6 Redundant Inputs								DE
6 Solid State Outputs								SE
6 Relay Outputs								RE
2 Latching Relay Outputs and 2 Relay Outputs								LE
3 Relay Outputs Form C								CE
12 Inputs								II
12 Redundant Inputs								DD
12 Solid State Outputs								SS
12 Relay Outputs								RR
4 Latching Relay Outputs and 4 Relay Outputs								LL
6 Relay Outputs Form C								CC
6 Solid State Outputs and 6 Relay Outputs								SR
6 Relay Outputs and 3 Relay Outputs Form C								SC
6 Solid State Outputs and 6 Inputs								SI
6 Relay Outputs and 6 Inputs								RI
2 Latching Relay Outputs and 2 Relay Outputs and 6 Inputs								LI
2 Latching Relay Outputs and 2 Relay Outputs and 6 Solid State Outputs								LS
2 Latching Relay Outputs and 2 Relay Outputs and 6 Relay Outputs								LR
<b>Current Limiting Output</b>								
None								0
48 Vdc								CL48
125 Vdc								CL125
<b>System Firmware</b>								
Standard (Current Released Version) - Blank selection								X
Version 10.1								1
Version 10.2								2