

TABLE OF CONTENTS

Par. <u>No.</u>	Section 1 General Description	Page <u>No.</u>
1-1	Introduction.....	1-1
1-2	General Description.....	1-1
1-3	Functional and Physical Specifications.....	1-1
1-4	Equipment Changes.....	1-1
1-5	Ordering Information.....	1-2
 Section 2 Installation		
2-1	Introduction.....	2-1
2-2	Electrical Service Recommendations.....	2-1
2-3	Unpacking and Inspection.....	2-1
2-4	Installation Instructions.....	2-2
2-5	Amplifier Module Connectors.....	2-2
2-5.1	Amplifier Module Status, Alarm, Control, and Power Connector	2-3
2-5.2	Amplifier Module RF Connector	2-4
 Section 3 Operating Instructions		
3-1	Introduction.....	3-1
3-2	Location and Function of Amplifier Module Controls and Indicators	3-1
3-3	Initial Start-Up and Operating Procedures	3-6
 Section 4 Principles of Operation		
4-1	Introduction.....	4-1
4-2	RF Input Signal.....	4-1
4-3	RF Output Load	4-1
4-4	System Functional Description.....	4-1
4-5	G3S-800-150 Amplifier Module.....	4-1
4-5.1	Main Amplifier	4-3
4-5.2	Error Amplifier.....	4-3
4-5.3	Amplifier Monitoring.....	4-3
4-5.4	Amplifier Module Cooling.....	4-4
4-6	Power Distribution	4-4
4-7	Intermodulation.....	4-4
4-7.1	Two Tone Intermodulation.....	4-4
4-7.2	Multitone Intermodulation	4-4
4-8	Alarms.....	4-4

TABLE OF CONTENTS (Continued)

Par. <u>No.</u>	Section 5 Maintenance	Page <u>No.</u>
5-1	Introduction.....	5-1
5-2	Periodic Maintenance.....	5-1
5-3	Test Equipment Required For Test	5-1
5-4	Cleaning Air Inlets/Outlets	5-2
5-5	Performance Test.....	5-2
5-5.1	Amplifier System Performance Test.....	5-2
5-6	Field Replaceable Parts and Modules	5-7
5-6.1	G3S-800-150 Power Amplifier Module	5-7
5-6.2	Cooling Fans.....	5-7

Section 6 Troubleshooting

6-1	Introduction.....	6-1
6-2	Troubleshooting.....	6-1
6-3	Return for Service Procedure	6-1
6-3.1	Obtaining an RMA	6-1
6-3.2	Repackaging for Shipment	6-1

LIST OF ILLUSTRATIONS

Figure <u>No.</u>		Page <u>No.</u>
1-1	G3S-800-150 Amplifier	1-3
2-1	G3S-800-150 Amplifier, Rear View.....	2-2
2-2	DC and Logic Connector (on Rear of G3S-800-150 Amplifier Module).....	2-3
2-3	Amplifier RF Connector	2-4
3-1	G3S-800-150 Amplifier Module RF Control and Indicators	3-1
4-1	G3S-800-150 Two Module Amplifier System	4-2
4-2	G3S-800-150 Power Amplifier Module Functional Block Diagram	4-3
5-1	Amplifier System Test Setup Diagram.....	5-5

LIST OF TABLES

Table <u>No.</u>		Page <u>No.</u>
1-1	Major Amplifier Components.....	1-2
1-2	G3S-800-150 Multicarrier Cellular Amplifier Functional Specifications.....	1-2
2-1	Amplifier Module DC and Logic Connector Definition	2-3
2-2	Amplifier RF Connector Definition.....	2-4
3-1	Amplifier Module RF Control and Indicators Definition.....	3-2
5-1	Periodic Maintenance.....	5-1
5-2	Test Equipment Required.....	5-2

5-3	Multicarrier Cellular Amplifier System Test Data Sheet	5-6
6-1	Troubleshooting.....	6-1