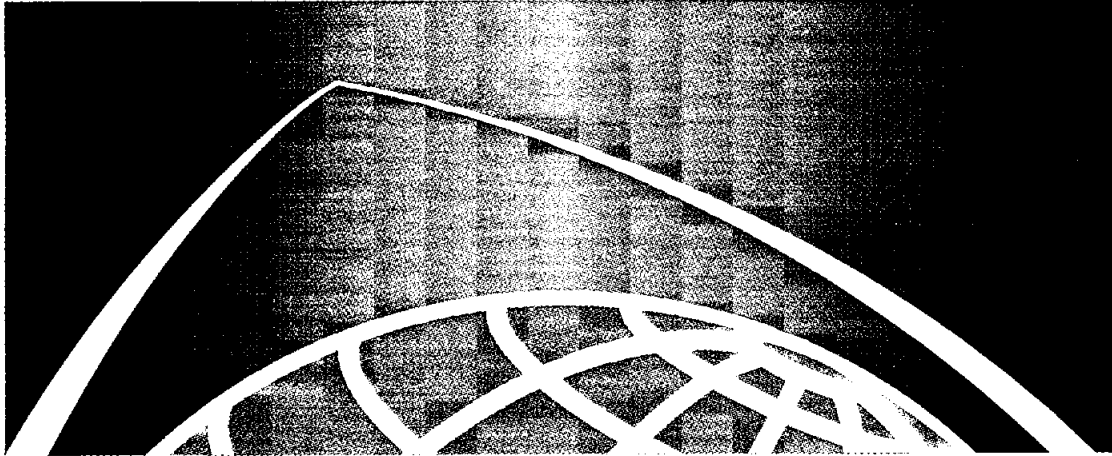


Globalstar™



**Globalstar GSP-1620 Satellite
Packet Data Modem
Regulatory Approval Letters,
Certificates and Declaration
Documents**

MH80-99300-1 X1

QUALCOMM®

QUALCOMM Incorporated
5775 Morehouse Drive
San Diego, CA, 92121-1714
U.S.A.

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Globalstar User Terminals (Portable, Mobile and Fixed) Regulatory Approval Letters, Certificates and Declaration Documents

MH80-99300-1 X1

October 11, 2000



Company	QUALCOMM Inc.	Equipment	Globalstar GSP-1620 Satellite Packet Data Modem
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1. INTRODUCTION

1.1 Purpose of this Document

This document contains the regulatory certificates and declarations issued against Qualcomm's GSP-1620 Globalstar Satellite Packet Data Module. The GSP-1620 is a fixed satellite earth station designed for use within the satellite communications network known as "Globalstar".

2. EUROPEAN TYPE EXAMINATION

2.1 European Directives

The Qualcomm Inc. manufactured Globalstar GSP-1620 Satellite Packet Data Modem complies with the requirements of the European R&TTE Directive 1999/5/EC. This product was tested and found to be compliant with the following technical standards:

EN 300-831 (1998-03). Electromagnetic Compatibility (EMC) For Mobile Earth Stations (MES) used within Satellite Personal Communications Networks (S-PCN).

TBR 041(1998): Terminal Essential Requirements for Mobile Earth Stations (MES) used within Satellite Personal Communications Networks (S-PCN) 1.6/2.4 GHz bands under the Mobile Satellite Service (MSS).

This product was tested at the following laboratory and the results presented to the British Approvals Board For Telecommunications (BABT) for approval.

Qualcomm, Inc.
10309 Pacific Center Court
Sand Diego, CA 92121
USA

The BABT Certificate and Letter of Approval are contained in Annex **A** of this document.

The Qualcomm Inc. prepared "Declaration of Conformity to Type" is contained in Annex **B** of this document.

3. UNITED STATES OF AMERICA EQUIPMENT AUTHORIZATION

3.1 Applicable Codes of Federal Regulations

The Qualcomm Inc. manufactured Globalstar GSP-1620 Satellite Packet Data Modem complies with the following sections as referenced in the Federal Communications Commission (FCC) Code of Federal Regulations (CFR) 47; Telecommunication:

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FCC CFR 47 Part 15 Radiated & Conducted Emissions

FCC CFR 47 Part 25 Satellite Communications Requirements

FCC CFR 47 Part 2 MPE (Maximum Permissible Exposure) Limits

FCC Grant of Equipment Authorization certificate is contained in Annex **C** of this document.

4. INDUSTRY CANADA CERTIFICATION

The QUALCOMM Inc. manufactured Globalstar GSP-1620 Satellite Packet Data Modem complies with the following Industry Canada requirements:

RSS-170, Satellite Mobile Earth Stations

The Industry Canada certificate is contained in Annex **D** of this document.

5. SAFETY CERTIFICATION

5.1 European Requirements

The Globalstar GSP-1620 Satellite Packet Data Modem complies with the requirements of the Low Voltage Directive 73/23/EEC, amended by the Directive 93/68/EEC and carries the CE mark accordingly.

6. WARNINGS

Qualcomm Incorporated is not responsible for interference caused by unauthorized modifications of this equipment or the substitution or attachment of connecting cables and equipment other than those specified by Qualcomm Incorporated. The correction of interference caused by such unauthorized modifications, substitution or attachment will be the responsibility of the user.

CAUTION: Changes or modifications not expressly approved by Qualcomm Incorporated could void the user authority to operate this equipment.



Accredited by the
Council for
Accreditation

B A B T

Certificate

This certificate is issued to

Qualcomm Inc

of

5775 Morehouse Drive
San Diego
California
92121-1714
USA

to certify that the Equipment known as

Globalstar GSP-1620

conforms to the essential requirements of the Council Directive 1999/5/EC on the basis of the Technical Construction File number 80-99256-1 in relation to the essential requirements of Articles 3.1 (b); 3.2 of the Directive.

Signed:

On Behalf of BABT

Issue Date: 31 August 2000

Number: NC/000072 Issue: 01

This certificate is issued by BABT.
The conditions for the validity of this certificate, if any, are listed in the Annex.
This certificate is not transferable and remains the property of BABT.

CERTIFICATE

Equipment Details:

Total Units: 1

Unit Type: Satellite packet data modem, R&TTE class 1

Equipment Category: Satellite Earth Station S-PCN

Trade Name: Globalstar

Type Designation: GSP-1620

Intended Use of Equipment: To provide a communication link with the Globalstar Satellite Network system

Frequency Range(s): Transmitter: 1610 to 1621.35 MHz
Receiver: 2483.5 to 2500 MHz

Temperature Range(s): -30°C to + 60°C

Number of Channels: 9 Tx Channels

Channel Spacing(s): 1230 KHz

Designation of Emissions: (ITU) 1M25G1W

Power Characteristics: Radiated, intermittent duty
2.82 Watts

RF Software / Firmware: 4.7.1.0.1 version

Specifications(s): EN300 831 v1.2.1 (October 1999)
TBR 041 (February 1998)

Comments:

Test House Name: Qualcomm

Test Report Numbers: 80-99255-1 X1, 80-99256-1 X1, 80-99279-1 X1,
80-99280-1 X1

Signed: Alan Bils

Date: 7th September 2000

on behalf of BABT



QUALCOMM Incorporated

5775 Morehouse Drive
San Diego, CA 92121-1714

www.qualcomm.com

Declaration Of Conformity

Type Of Equipment: Satellite Earth Station Equipment.

Model: Globalstar Packet Data Modem

Model Number: GSP-1620

Product Description: The product is a satellite modem module designed for use within the Globalstar Satellite Communications Network. The products are uniquely identified by electronic serial numbers (ESN's).

We, Qualcomm Incorporated of 5775 Morehouse Drive, San Diego, California 92121, USA, declare under sole responsibility that the product to which this declaration relates is in conformity with:

(a) EN 300 83 1 V1.2.1; October 1999

(b) TBR 041; February 1998

We hereby declare that all essential test suites have been carried out and that the above named product is in conformity to all the essential requirements of Directive 1999/5/EC.

The conformity assessment procedures referred to in Article 10 and detailed in Annex (IV) of the Directive 1999/5/EC has been followed with the involvement of the following Notified Body:

BABT, Claremont House, 34 Molesey Road, Walton-on Thames, K12 4RQ, UK
Identification Mark: 168 (Notified Body Number)

The technical documentation relevant to the above equipment will be held at:

Qualcomm Europe
Ronald Foerster, Sr VP & GM
LES ALGORITHMES 2000, Route des Lucioles,
Sophia Antipolis 06560,
Valbonne, France



QUALCOMM Incorporated

5775 Morehouse Drive
San Diego, CA 92121-1714

www.qualcomm.com

Declaration Of Conformity

Issued By: Qualcomm Incorporated
San Diego
California 92121
USA

Signed:

A handwritten signature in black ink, appearing to read 'P. Guckian', written over a horizontal line.

Date: 25th August 2000.

Paul Guckian
Director, Engineering
Regulatory Group
Qualcomm Globalstar Project

GRANT OF EQUIPMENT AUTHORIZATION

Certification

Qualcomm Incorporated
5775 Morehouse Drive
San Diego CA 92121

Date of Grant: 9/11/00

Application Dated: 6/14/00

Attention: Suzanne Galati, Assoc. Quality Engineer

NOT TRANSFERABLE

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and is VALID ONLY for
the equipment identified hereon for use under the Commission's Rules and Regulations listed below.

FCC IDENTIFIER

J9CGSPDM1

Name of Grantee

Qualcomm Incorporated

Equipment Class : Licensed Non-Broadcast Station Transmitter

Notes: Globalstar GSP-1620 Satellite Packet Data Modem

<u>Grant Notes</u>	<u>FCC Rule Parts</u>	<u>Frequency Range (MHZ)</u>	<u>Output Watts</u>	<u>Frequency Tolerance</u>	<u>Emission Designator</u>
	25	1610 - 1621.35	2.82	10 PM	1M25G1W

This is an interim Grant of Certification based on compliance with all relevant portions of Parts 1, 2 and 25 as specified in the NPRM for GEN Docket 98 - 68 adopted on May 14, 1998. We are granting this interim approval on the basis that final approval must satisfy the requirements and procedures adopted in our future GMPCS - MoU implementation proceeding, including the specific spurious and out - of - band emission limits adopted in the proceeding. Power output listed is EIRP.

Output is EIRP. Device is a satellite modem module operating with a specific 7 dBic antenna for vehicle-mount or installation at outdoor fixed locations to provide a separation distance of 21.5 cm or more from persons for satisfying MPE requirements. Installers and end-users must be provided with appropriate installation requirements for satisfying RF exposure compliance.

EA97895



**RADIO EQUIPMENT CERTIFICATE
OF
TYPE APPROVAL**

**CERTIFICAT D'HOMOLOGATION
DE
MATÉRIEL RADIO**

CERTIFICATION No. No. DE CERTIFICATION	➤	2723701124A
ISSUED TO DÉLIVRÉ À	➤	QUALCOMM INCORPORATED
TYPE OF EQUIPMENT GENRE DE MATÉRIEL	➤	SATELLITE PACKET DATA MODEM TRANSCEIVER
TRADE NAME AND MODEL MARQUE ET MODÈLE	➤	GSP-1620
FREQUENCY RANGE BANDE DE FRÉQUENCES	➤	1610 MHz to 1621.35 MHz
EMISSION DESIGNATION DESIGNATION D'ÉMISSION	➤	1M25G1WEW
R.F. POWER RATING PUISSANCE NOMINALE H.F.	➤	2.8 Watts, 4.5 dBW EIRP MAX.
CERTIFIED TO CERTIFIÉ SELON LE	➤	SPECIFICATION RSS170 CAHIER DES CHARGES

ISSUE 1
ÉDITION

Certification of equipment means only that the equipment has met the requirements of the above noted specification. License applications, where applicable to use certified equipment, are acted on accordingly by the issuing office and will depend on the existing radio environment, service and location of operation.

L'homologation de matériel terminal signifie seulement qu'il est conforme aux exigences du cahier des charges mentionné ci-dessus. Les demandes de licence, le cas échéant en vue de l'utilisation de matériel certifié seront traitées en conséquence par le bureau chargé de délivrer lesdites licences, en tenant compte du milieu radioélectrique ambiant, du service radio existant et de l'emplacement de la station.

This certificate is issued on condition that the holder complies and will continue to comply with the requirements of the radio standards specifications and procedures issued by the Department.

Le présent certificat est délivré à condition que le détenteur se conforme et continue à se conformer aux cahiers des charges et procédures sur les normes radioélectriques publiées par le ministère.

ISSUED UNDER THE AUTHORITY OF MINISTER OF INDUSTRY
DELIVRE AVEC L'AUTORISATION DU MINISTRE DES INDUSTRIES

DATE **August 31, 2000**

FOR

DIRECTOR GENERAL
SPECTRUM
ENGINEERING
BRANCH

DIRECTEUR GÉNÉRAL
GÉNIE
DU SPECTRE