



## Description

The Global Certification Forum (GCF) and the PCS Type Certification Review Board (PTCRB) together defined test criteria for certification of 2G, 3G and 4G mobile equipment in the following internationally accepted standards:

- 3GPP TS26.131
- 3GPP TS26.132
- 3GPP TS51.010-1

As a member of GCF and PTCRB, HEAD acoustics is able to offer the GCF/PTCRB-approved test platforms TP89, TP90 and TP190. Each platform comprises different generations of HEAD acoustics hardware and software components necessary for conclusive and repeatable testing of such devices. The table on the next page shows an overview of all three platforms.

The test platforms can be used for convenient and efficient development and testing for later approval of 2G/3G/4G mobile equipment by GCF and/or PTCRB. A successful test of a device on one of these test platforms in conjunction with an (unmodified) HEAD acoustics measurement standard TS 26131-32 or TS 51.010-1 qualifies the device for certification by GCF/PTCRB.

To authenticate that the device has been tested on a certified test platform, the ACQUA software options ACOPT 23 and ACOPT 24 add written confirmation to the ACQUA test report generated after a test run. This is required by GCF/PTCRB for certification of a tested device. ACOPT 23 adds confirmation for GCF, ACOPT 24 for PTCRB. The software options can be applied individually or together. To guarantee that test results have been obtained

in accordance with the test as it was specified, the measurement standard must not be modified in any way. With the ACOPTs 23 and 24, this is stated as well.

When submitting a test result for 2G/3G/4G mobile equipment to the GCF/PTCRB for approval, this confirmation authenticates the use of an unmodified, certified test platform. This is a requirement, but it also benefits quick and hassle-free certification of the device.

## General Requirements

- Hardware and software as specified in Test Platform TP89, TP90 or TP190
- Use of the measurement standards TS 26131-32 or TS 51.010-1 with unmodified SMDs
- A valid software maintenance agreement (SMA) for existing customers



## DATA SHEET

### ACOPT 23/24 (Code 6848/6849) Option GCF/PTCRB

#### Overview

The GCF/PTCRB-approved test platforms TP89, TP90 and TP190 comprise specified HEAD acoustics hardware and software components. The platforms can be used for instrumental audio testing of 2G, 3G and 4G mobile equipment as defined by GCF/PTCRB in the standards 3GPP TS26.131, TS26.132 and TS51.010-1.

Using these platforms allows manufacturers and test laboratories to submit test results of 2G/3G/4G mobile equipment to the GCF/PTCRB for official approval according to these standards. To authenticate that a device has been tested on a certified platform, the ACOPTs 23 (GCF) and 24 (PTCRB) add written confirmation to the ACQUA test report as required by GCF/PTCRB.

#### Key Features

- Can be added to a suitable ACQUA system as a software option (ACOPT) at any time
- Adds written confirmation of the use of a GCF/PTCRB-certified test platform to ACQUA test reports → Required by GCF/PTCRB for certification of applicable mobile equipment
- Separate utilization as needed:
  - ACOPT 23 for GCF
  - ACOPT 24 for PTCRB

#### Applications

- GCF and/or PTCRB-approved audio testing of 2G/3G/4G mobile equipment according to:
  - 3GPP TS 26.131
  - 3GPP TS 26.132
  - 3GPP TS 51.010-1

#### Delivery Items

- **ACOPT 23 (Code 6848)**, for GCF, delivered as V2C file for ACQUA **and/or**
- **ACOPT 24 (Code 6849)**, for PTCRB, delivered as V2C file for ACQUA

## Overview<sup>1</sup> of GCF/PTCRB-certified test platforms

Test platform (TP)	TP89		TP90		TP190	
		Code		Code		Code
Frontend / hardware platform and extensions	MFE III.1 or MFE III.2	6201  6202	MFE VI-BEQ MFE VI.1 MFE VIII.1 Cod-AMR MFE VIII.1-IMP	6461 6462 6484 6485 6496	labCORE with • coreBUS • coreOUT-Amp2 • coreIN-Mic4 • coreBEQ • coreIP • coreIP-IMP • coreIP-AMR • coreIP-EVS	7700 7710 7720 7730 7740 7770 7771 7772 7773
Artificial head system Impedance simulators	HMS II.3 with • HIS L • HIS R <sup>2</sup>	1230 1231 1232	HMS II.3 with • HIS L • HIS R <sup>2</sup>	1230 1231 1232	HMS II.3 with • HIS L • HIS R <sup>2</sup>	1230 1231 1232
Pinnae (Type 3.3)	• HER IV.2 <sup>2</sup> • HEL IV.2 <sup>2</sup>	1381 1382	• HER IV.2 <sup>2</sup> • HEL IV.2 <sup>2</sup>	1381 1382	• HER IV.2 <sup>2</sup> • HEL IV.2 <sup>2</sup>	1381 1382
Pinnae (Type 3.4)	• HEL III.1 • HER III.1	1248 1249	• HEL III.1 • HER III.1	1248 1249		
Handset positioner	HHP III.1	1403	HHP III.1	1403	HHP IV	1406

### Certification for 3GPP TS26.131/.132

ACQUA version	2.3.300 or higher	6810	3.3.300 or higher	6810	4.1.100 or higher	6810
TS 26 131-32 database revision	03 GCF PTCRB	6777	09 GCF PTCRB	6777	13 GCF PTCRB	6777
UG TS 26 SWB/FB database revision	(not certified)		(not certified)		05 GCF PTCRB <sup>3</sup>	60028
3GPP specification release TS26.131/.132	V7.1.0, Release 7		V12.4.0/V12.6.0, Release 12		V12.5.0/12.8.0, Release 12	

### Certification for 3GPP TS51.010-1

ACQUA version	2.3.300 or higher	6810	2.3.300 or higher	6810	(not certified)
TS 51.010-1 database revision	06	6742	06	6742	
3GPP specification release TS51.010-1	Section 30, V7.8.0, Release 7		Section 30, V7.8.0, Release 7		

### ACOPT for 'GCF/PTCRB-certified' label

GCF	ACOPT 23	6848	ACOPT 23	6848	ACOPT 23	6848
PTCRB	ACOPT 24	6849	ACOPT 24	6849	ACOPT 24	6849

1) This table contains all devices, hardware options and software options that were certified as a test platform by GCF/PTCRB. Specific tests may only require part of the listed items.

2) Standard delivery item of HMS II.3

3) Requires HMS II.3 with two-way mouth