

# Quark T12x

## Quark C12x

Stress Testing ECG



Diagnostic Quality 12-lead Stress Testing ECG available in telemetry or cable configuration

- ▶ Resting and Exercise ECG interpretation
- ▶ Full Disclosure ECG analysis
- ▶ ST segment, ST slopes, Trends
- ▶ Arrhythmia Analysis
- ▶ Standard and User defined Exercise Protocols
- ▶ Integration with COSMED Gas exchange equipment
- ▶ Patient Database & Network Compatibility



**COSMED**  
The Metabolic Company

COSMED Quark C12x and T12x are the ideal diagnostic quality PC-based ECGs for patient care from prevention to rehabilitation. Ultimate quality ECG signal allows an efficient diagnosis of coronary artery disease, the evaluation of patients after artery bypass surgery or angioplasty, and allows to document response to therapies and prevent from myocardial infarction.

Combined with any COSMED gas exchange analysis equipment, Quark C12x or Quark T12x become the complementary tools that help clinician to quantify patient's functional capacity and evaluate cardiac response in athletes.

- ▶ On-line filtering and automated base-line correction
- ▶ Exceptional clarity of on-screen ECG
- ▶ User defined, automatic print during test

## Available versions

**Quark T12x** - 12-lead Wireless Stress Test ECG (Telemetry)

**Quark C12x** - 12-lead Patient Cable Stress Test ECG, with USB communication interface



Quark T12x (Wireless)



Quark C12x (USB patient cable)

## Applications

Quark T12x and C12x are used in:

- ▶ Cardiology
- ▶ Pneumology
- ▶ Cardiac Rehabilitation
- ▶ Sport Medicine
- ▶ Primary care

## Stress Test ECG

COSMED PC-based stress testing systems offer the ultimate in stress testing flexibility. The **Quark T12x** (with wireless technology) or the **Quark C12x** (with a traditional ECG patient cable) meet the most advanced requirements for clinical exercise testing.

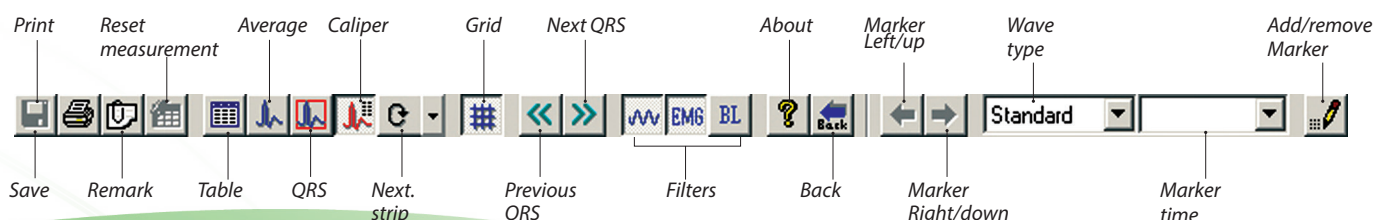
Powerful software allows full control over ECG acquisition, real time display, report configuration and printing. High resolution ECG processing produces an exceptionally clear on-screen display and allows detailed, reliable analysis of ST segments and subtle arrhythmia changes.

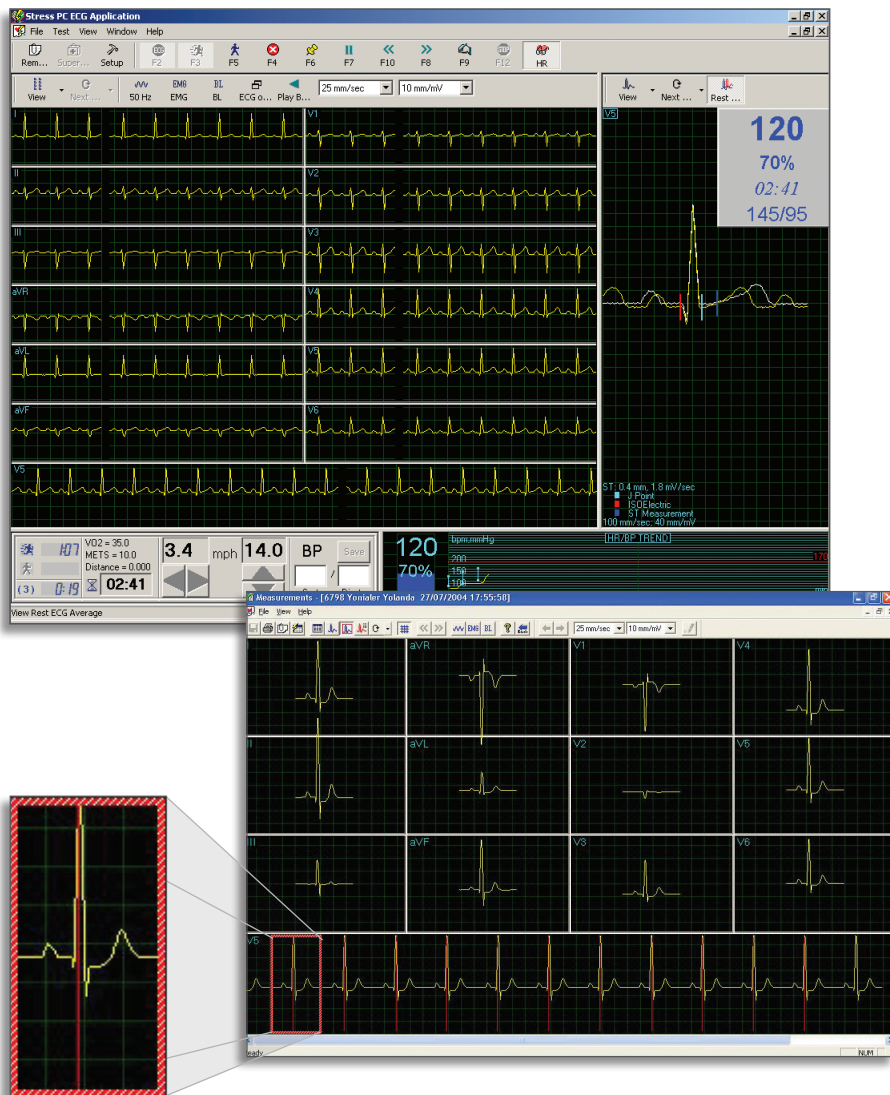
Main features are:

- ▶ Retrospective ECG and arrhythmia analysis even during test
- ▶ Full disclosure
- ▶ Scroll back during the test
- ▶ High resolution (up to 16,000 samples/sec) ECG processing
- ▶ State of the art Digital RF Wireless technology

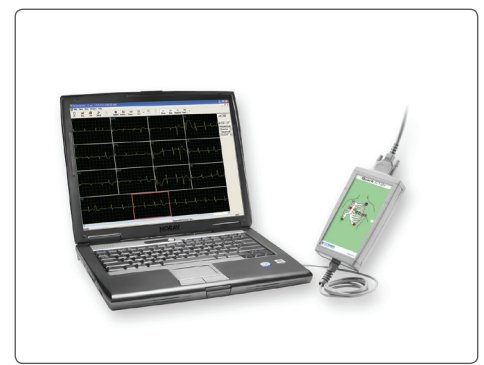
## Software Features

- ▶ Automatic Arrhythmia detection, print and capture: VPB and SVPB
- ▶ Real time and retrospective J Point and Isoelectric identification
- ▶ Remote viewing anywhere on your local hospital network room
- ▶ Standard paper or thermal paper print options
- ▶ User initiated and automatic capture of events
- ▶ User defined Exercise Protocols
- ▶ Integration with COSMED gas exchange equipment
- ▶ Predicted oxygen uptake and METS estimation
- ▶ Real time super imposition QRST complex
- ▶ Export formats: JPEG, XML, GDT, PDF





Real time ECG display and scroll back of all leads, QRS complexes and trends



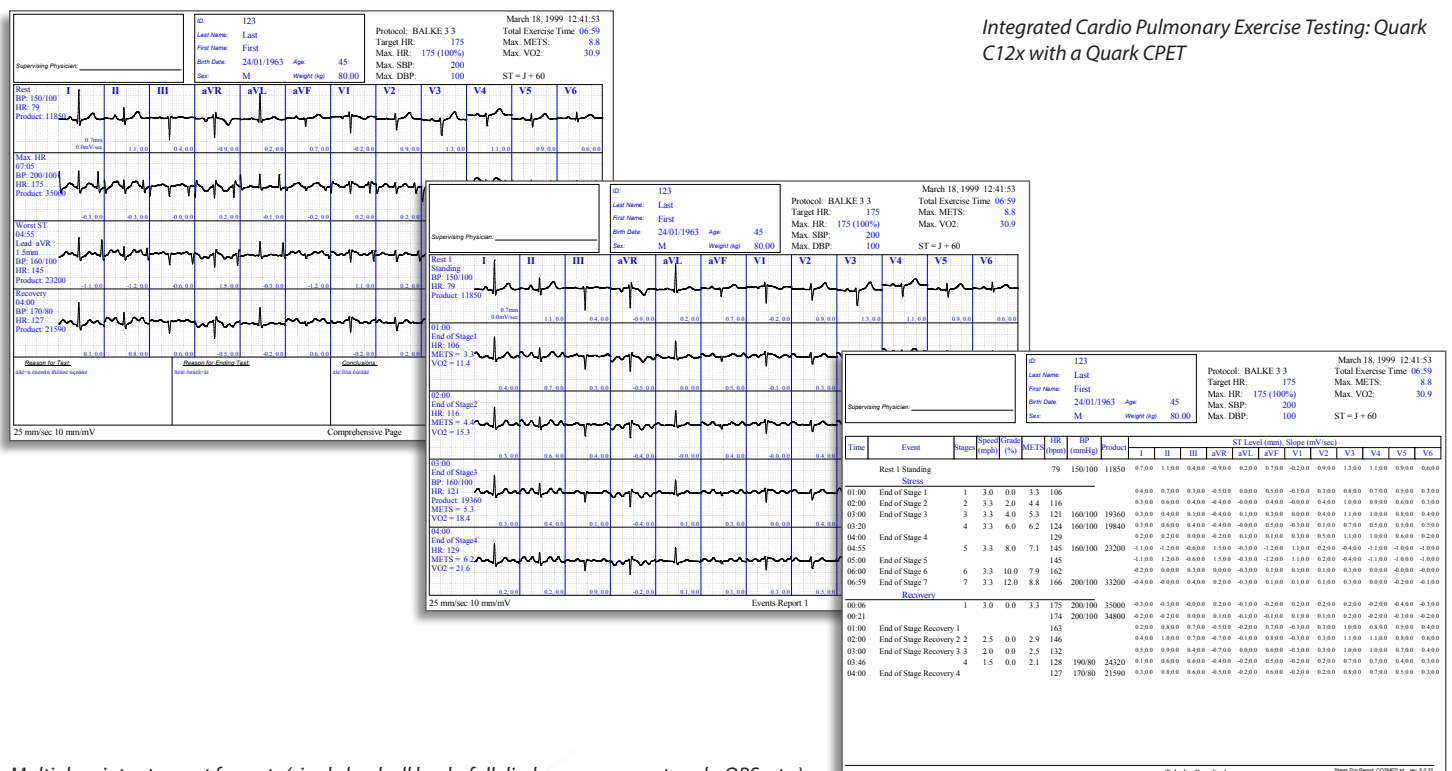
Quark C12x, direct USB connection to notebook



Integrated Cardio Pulmonary Exercise Testing: Quark C12x with Fitmate MED



Integrated Cardio Pulmonary Exercise Testing: Quark C12x with a Quark CPET



Multiple printout report formats (single lead, all leads, full disclosure, sum up, trends, QRS, etc.)



# Technical Specification

## ECG Functions

Resting ECG	•
Stress Testing ECG	•
Resting ECG w/ Interpretation	•
Full Disclosure ECG Analysis	•
Scroll-back during the ECG test	•
St Segment, St Slopes, Trends	•
Arrhythmia Analysis w/stress	•
Integration w/ COSMED Gas Exchange Equipment	○
User Defined Exercise Protocols	•
Patient Database & Network Compatibility	•
TTL Port For External HR Trigger	•

Hardware	Quark T12x	Quark C12x
Standard Leads	AHA or IEC	AHA Or IEC
Number of Electrodes	10	10
Communication	Digital RF *	USB
Radio Frequency Range (Auto-select)	2400 - 2483.5 Mhz	-----
Rf Output Power	0.4 mW	-----
Maximal Operational Distance (m)	~ 10	-----
Dimensions (cm)	14x9.5x5	17x9x3
Weight (g)	350	300

## Standard Packaging Includes

ECG Unit, Patient Cable, Electrodes

## Available Languages

English, French, Spanish, German, Dutch, Italian

## Pc Configuration Required

Pentium III (1 Ghz), Ram Memory: 256 MB, Hd Free Space: 20 GB, USB Ports, Operating: Windows XP (Sp2)/ Vista

## Electrical Requirements

Batteries	2 - AA Alkaline or NiMH Rechargeable	-----
Power Supply	-----	Via USB (5V)
Current Consumption	-----	< 200 mA $\pm$ 10%

## Safety & Quality Standards

IEC60601-1; IEC60601-2-25; IEC60601-2-27;

EN 60601-1-2 and EC11

FDA 510(K) Cleared

Federal Law Restricts This Device To Sale By Or On The Order Of A Physician

COSMED is an organisation whose quality management system is certified by CERMET according to UNI EN ISO 9001:2008 and UNI EN ISO 13484:2004

• Standard    ○ Option

\*Quark T12x Wireless ECG Transmitter has been optimized for working in noisy EM Environments (Bluetooth, Wi-Fi Networks, Cellphones etc.). It includes an automatic Channel Shift Feature for selecting the optimal Transmission Channel.



Distributed by:



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