

# SKINCOLORCATCH

ADVANCED TECHNOLOGY FOR  
SKIN COLOR MEASUREMENTS

## PRODUCT BENEFITS

- † Measures melanin index insensitive to erythema and erythema index insensitive to melanin
- † Shows RGB, CIE L\*a\*b\* and L\*c\*h\* color space coordinates
- † Calculates ITA° automatically
- † Readings unaffected by device contact pressure and ambient light
- † Portable and battery operated
- † Fast and convenient measurement
- † Calibration check tool included
- † Wireless data collection with Delfin Modular Core software with additional color parameters



## APPLICATION AREAS

- † Product and formulation R&D in pharmaceutical, personal care and cosmetic industries
- † Claims validation work
- † Efficacy testing
- † Skin research studies
- † Clinical dermatology
- † UV radiation induced erythema and pigmentation
- † Erythema related to allergy or irritation
- † Blanching effects
- † Skin whitening

## SKINCOLORCATCH

Erythema and melanin indices are indicators quantifying intensity of skin erythema and pigmentation. With traditional colorimeters erythema measurement is often affected by melanin and vice versa. These issues have been solved in the fully portable and pocket sized Delfin SkinColorCatch. The device also shows RGB, CIE  $L^*a^*b^*$  and  $L^*c^*h^*$  color coordinates and calculates automatically the ITA degree, which classifies the skin tone.

The SkinColorCatch may be used either as a stand-alone device or measurement data may be collected wirelessly to the DMC software where more color parameters are displayed. The DMC software allows users to set up individual projects and plot and print the results or export measurement data to other programs for editing.

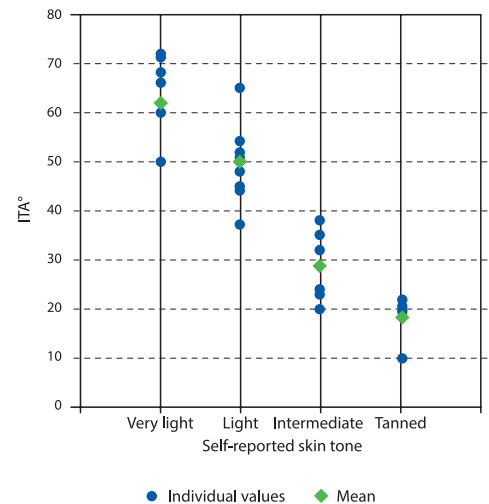
### SKINCOLORCATCH INSTRUMENTATION AND MEASUREMENT PRINCIPLE

White LEDs corresponding to daylight are arranged circularly

inside the measurement chamber of the SkinColorCatch. When the SkinColorCatch is gently placed on the skin, the LEDs illuminate the skin in the angle of 45 degrees to minimize gloss. The light reflecting back from the skin is detected with an RGB color sensor. The measured RGB and  $L^*a^*b^*$  readings are corrected using a reference color matrix measured with a spectrophotometer.

The measurement is not affected by ambient lighting conditions and the optical orifice of the SkinColor Catch is designed to minimize possible blanching effects caused by the contact pressure against the skin.

### ITA° AND SELF-REPORTED SKIN TONE OF 30 CAUCASIAN SUBJECTS' FOREARM



DELFIN INSTRUMENTS ARE USED  
WORLDWIDE IN OVER 40 COUNTRIES  
ON 6 CONTINENTS



Manufactured and Marketed by



#### HEAD OFFICE

Delfin Technologies Ltd.  
P.O. Box 1199  
70211 Kuopio, FINLAND  
Tel +358 50 911 1199  
info@delfintech.com