# Analyser Control Upgrades
## Get Ready for the Next Generation of Analyser Control

Efficient and accurate communications between the Analyser and the software are critical for high performance measurements. The newest standard for this system uses Ethernet compatible hardware and software components. Upgrading these components will bring your Analyser Control system up to the highest performance level possible.

## Key Features of the Upgraded Components

- A complete Windows 10 Solution for analyser control
- Improved signal integrity
- Most recent SES software version
- Ethernet interface simplifies rack add ons
- Future ready: PEAK software compatibility
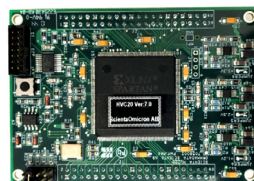
### *Analyser Control Upgrade Package Offer*

To support the transition to an upgraded analyser control system we have bundled together the four components for a discounted price with one year Remote Support

- Remote installation support
- 20% discount
- Telephone and email support
- Troubleshooting assistance

Contact us to talk about the Upgrade Package Offer

*This offer is only availabe when purchasing all four components together in the same transaction

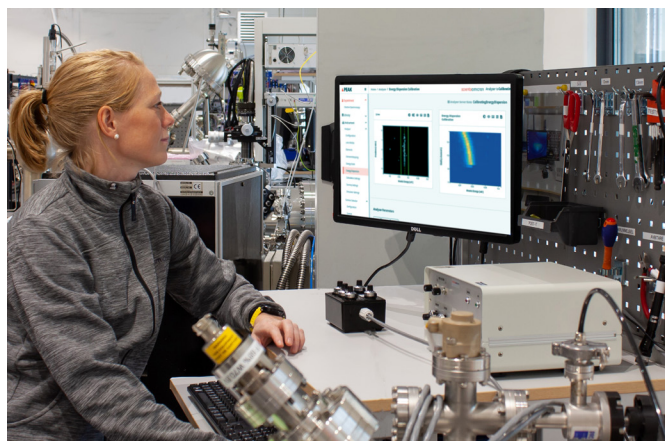### The Analyser Control Upgrade Package


Card HVC20 v 7.0


Windows 10 Instrument PC


CMOS Ethernet Camera


Ethernet Rack Upgrade



## Future Ready

▲ PEAK

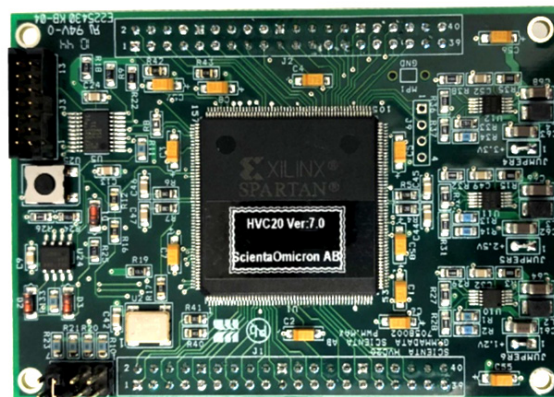**The Next Generation Software Platform for Analyser Control**

Scienta Omicron is currently developing the next generation of software platform for analyser control - PEAK. PEAK's new features includes web based technologies that enable remote control from any device. Upgrading these four components will bring your analyser into compatibility with the future release of the PEAK software platform.

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# Card HVC20 v 7.0

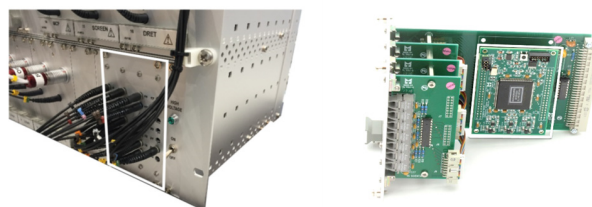## Updated High Voltage Control

The HVC20 FPGA mezzanine board handles the communication in the High Voltage rack. New firmware implements the latest updates and improves the stability of the data link.

The HVC20 card sits on the Digital Output Module (DOM) and controls the voltage supplies via optical fibres. Card HVC20 v 6.0 or later is required for ethernet communication and PEAK compatibility.

### Features
- Fast ethernet communication
- Improved stability of the data link
- v 7.0 implements 'Heartbeat Functionality'*
- PEAK compatibility
  * Available in PEAK

# Windows 10 Instrument PC

## Pre-configured and Customised

## High-end Windows 10 PC with Full Support

A pre-configured and customised computer that meets the new PC requirements and provides the latest platform technology for PEAK software compatibility.
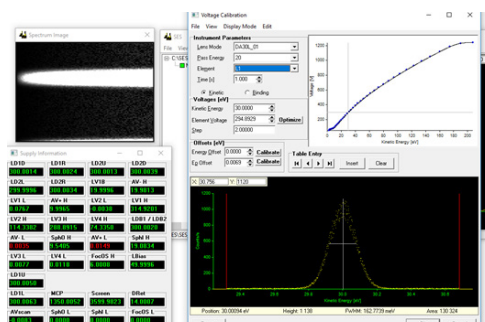
Pre-configured ethernet computer with customised SES analyser control software, Pylon5, Igor Pro 8, and Team Viewer for support installed.

Windows 10 Instrument PC - Customised for Analyser Control

### Features
- Windows 10 64-bit computer with hardware and software necessary for analyser control
- 'Plug and Play', customised and pre-installed
- Most recent SES software version with real-time straight slit compensation
- Igor Pro 8 software license
- PEAK compatibility

# CMOS Ethernet Camera Assembly

## Customised High-Speed Detector Module

New CMOS sensor type for higher resolution and speed. A fully integrated hardware and software digital ethernet camera with a customised lens for the specific analyser and application type.

- Sensor type CMOS
- Resolution 1440 x 1080 pixel
- Frame rate 73 fps*
- Interface GigE
- Consists of a Basler ACE ethernet camera, integrated camera holder and support tube, power supply and 10 m ethernet cable
- Customised camera lens for your analyser

    *Maximum theoretical frame rate at full resolution

### Features
- Advantages to previous assemblies with CCD Sensor
    - Faster (higher frame rate)
    - Higher resolution
    - Better noise performance
- Improved signal integrity gives unlimited cable length
- PEAK compatibility

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# Ethernet Rack Upgrade
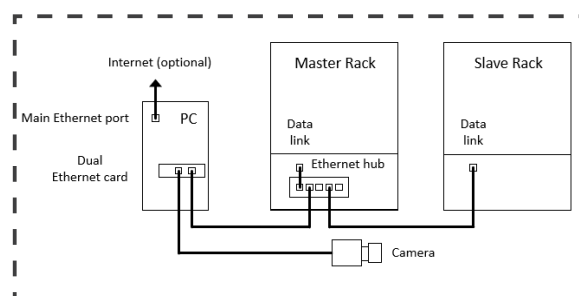
## Completes the All Ethernet Solution

Replaces the RS422/USB data link between the Instrument PC and HV-Rack with GigE interface.

The HV-Rack is upgraded with a new inlet plate on the back which is equipped with an ethernet switch (hub). The hub links all ethernet devices connected to the instrument PC, including the HV-Rack itself.

### Features
- Enabled ethernet communication between PC and rack
- Improved signal integrity gives unlimited cable length
- The ethernet interface simplifies rack add ons
- PEAK compatibility

## Technical Data

### Analyser Control Upgrade Package
**Part number**
- 201071 Analyser Control Upgrade Package

### Card HVC20 v 7.0
**Part numbers**
- 70581XX Card HVC20 (with firmware)

**Parts included**
- 70581XX Card HVC20 (with firmware)
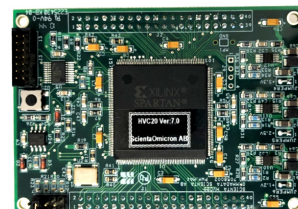
**Prerequisities**
- A compatible Digital Output Module (please contact us to discuss a seperate DOM Upgrade if required)

**Onsite effort**
- Does not require SO Engineer on-site

**Options**
- Card HVC20 can be upgraded (70581XX)
- Combine with other upgrades, installations or on-site training



### Windows 10 Instrument PC
**Part numbers**
- 201042 Windows 10 Instrument PC

**Parts included**
- 201042 Windows 10 Instrument PC (does not include monitor/display)
- Power cable

**Prerequisites**
- 102133 DOM Upgrade
- 70581XX Card HVC20 (with firmware ≥3.3)
- Depending on current configuration, additional upgrades may be required

**Onsite effort**
- Does not require SO Engineer on site

**Options**
- 201040 Ethernet Rack Upgrade (required for PEAK compatibility and remote support)
- Ethernet Camera (required for PEAK compatibility and remote support)
- Combine with other upgrades, installations or on-site training



### CMOS Ethernet Camera Assembly
**Part numbers**
- 201068 Camera Assembly Basler ACE 73gm

**Parts included**
- 201068 Camera Assembly Basler ACE 73gm
- Power cable, 12 V adapter
- Camera lens (customised to your analyser specificiations)
- 10 m ethernet cable

**Prerequisites**
- 102133 DOM Upgrade
- 201042 Windows 10 Instrument PC
- 201040 Ethernet Rack Upgrade (not required but recommended)
- Depending on current configuration, additional upgrades may be required

**Onsite effort**
- Does not require SO Engineer on site

**Options**
- Combine with other upgrades, installations or on-site training



### Ethernet Rack Upgrade
**Part numbers**
- 201040 Ethernet Rack

**Parts included**
- New inlet plate for the HV-Rack. Pre-assembled with ethernet hub and cabling
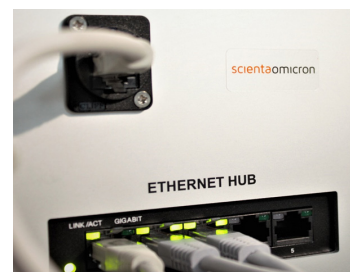
**Prerequisites**
- 70581XX HVC20 v 6.0 or later
- 201042 Windows 10 Instrument PC
- 201068 Camera Assembly Basler ACE 73gm

**Onsite effort**
- Does not require SO Engineer on site

**Options**
- Combine with other upgrades, installations or on-site training



## How to contact us:
www.scientaomicron.com/contactus
info@scientaomicron.com

Analyser Control Upgrade Package/ V03/April .21 ■ Specifications and descriptions contained in this brochure are subject to change without notice.

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