# norwia

# miniHUB and SMC series

# Remote production & OB production



2017

# Remote production with miniHUB and SMC (SMPTE Media Convertors)

Today Norwia can provide a full optical solution from end to end for transporting camera based SMPTE signals for the following area's;

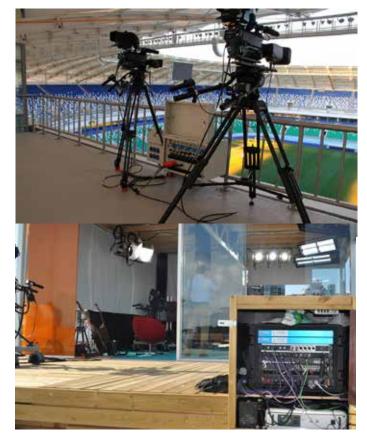
- Camera to OB Truck
- Camera to Studio for long distance remote production

Norwia have introduced the SMC series product line to enable multiple branded camera to be adapted from SMPTE 304M to a more standadized connector (LC) for multiplexing of remote signals back to the OB Truck or back to a fixed location, i.e. Studio.

Norwia covers the following brands Sony, Hitachi, Ikegami and Grass Valley. For model information please refer to the technical data sheets for more information.

#### Features

- Single camera per unit and Dual camera units
- Switchable for Sony, Hitachi and Ikegami via rotary switch and a separate unit for Grass Valley
- LC optical connectors (2) for Single Unit, (4) for dual units
- LED for link status
- 300VA, 600VA version is available on request for driving large box lens
- Can be rack mounted into a chassis for two SMC-CAM-P-LC
- Ideally suited for miniHUB optical transport for multiplexing multiple camera through 1 fiber
- Rugadized construction
- Multiplexing solution available with miniHUB



# SMC-CCU-LC / SMC-CAM-LC

The SMC (SMPTE Media Convertor) system from Norwia has been designed to allow SD-SDI and HD-SDI broadcast cameras fitted with Standard SMPTE 304M hybrid connectors to be deployed using ordinary single mode optical fiber.

This system allows the user to replace the fiber/copper hybrid cable between the camera and the CCU with standard fiber cable. The SMC system is perfect for Stadiums, Arenas and Concert Halls that have preinstalled fiber networks.

Both ends of this system are enclosed in a compact, lightweight, ruggedized aluminum enclosure.



The SMC-CCU-LC IS also available in Grass Valley camara formats. SMC-CCU-GV-LC

#### SMC-CAM-P-LC

The single SMC (SMPTE Media Convertor) system from Norwia has been designed to provide power insertion to broadcast cameras fitted with Standard SMPTE 304M hybrid connectors, thus allowing them to be remotely powered over the hybrid cable. Power can be inserted and transferred to the remote camera which can be up to 300m away. When combined with the SMC-CCU, cameras can be remotely deployed using the ordinary single mode optical fiber network that may exist within a stadium, campus or metro area.



SMC-CAM-P-LC is provided in a compact footprint for the most cost-effective solutions. A rotary switch determines the camera type (Sony,Hitachi & Ikegami). A separate units is available for Grass Valley cameras. (SMC-CAM-GV-P-LC)

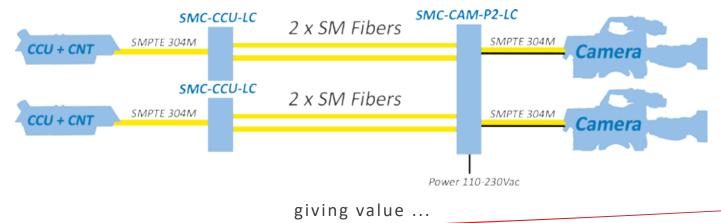


#### SMC-CAM-P2-LC

The dual SMC (SMPTE Media Convertor) system from Norwia has been designed to provide power insertion to broadcast cameras fitted with Standard SMPTE 304M hybrid connectors, thus allowing them to be remotely powered over the hybrid cable. Power can be inserted and transferred to the remote camera which can be up to 300m away. When combined with the SMC-CCU, cameras can be remotely deployed using the ordinary single mode optical fiber network that may exist within a stadium, campus or metro area.

SMC-CAM-P2-LC is provided in a compact footprint for the most cost-effective solutions. A rotary switch determines the camera type (Sony,Hitachi & Ikegami). A separate units is available for Grass Valley cameras. (SMC-CAM-GV-P2-LC)



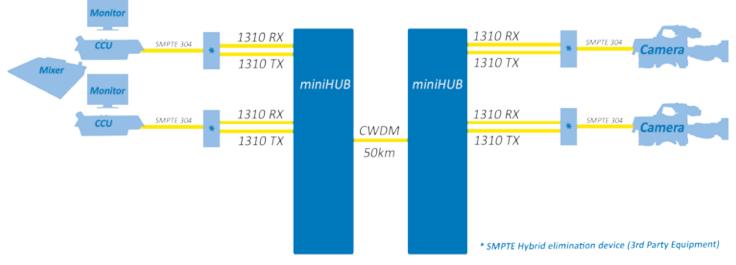


### Remote production with Norwia

Norwia provides an unique remote production package in which the core fiber structure is built around the miniHUB optical fiber distribution solution.

Depending on the peripheral equipment being the camera and CCU package, Norwia can provide an optical multiplexed solution that can grow with a selection of signal formats in addition to the multiplexed protocol from the camera to base station.

One of the benefits of using the miniHUB optical fiber distribution system is the extended distance that can be achieved, which is the best in market today.

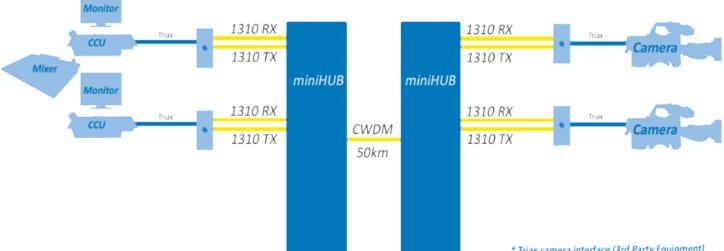


# **Optical camera system with Norwia's SMC product range**

Optical camera based systems need to have conversion between SMPTE Optical connector to LC type optical connector and provide a power up sequence to enable the base station and camera communicate. Power is supplied from the SMPTE optical connector through the SMPTE Hybrid elimination device that powers the camera locally. This is the same for the CCU end of the camera chain.

Depending on the nature of the SMPTE Hybrid elimination system, either passive or active a maximum of 8 cameras can be operated on 1 fiber. This gives virtually zero latency operational qualities compared to other compressed IP remote solutions.

# Optical camera system with TRIAX/Optical systems



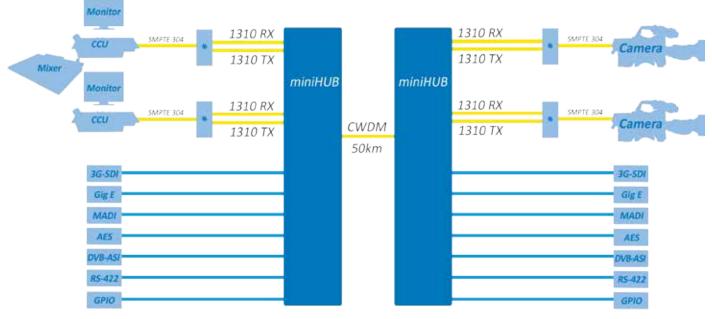
\* Triax camera interface (3rd Party Equipment)

Add on Triax/Optical based systems are also good for bridging older camera systems for optical distribution networks. These type of systems can be directly mounted to the camera and eliminate the Triax part of the system.

Norwia's solution brings together ready made technology and develops the fiber backbone in a flexible user package. The benefits are enormous for anyone wanting a remote production facility and easily gain by using the miniHUB optical distribution system from Norwia.

www.norwia.no

# Camera systems including expansion possibility with miniHUB



\* SMPTE Hybrid elimination device (3rd Party Equipment)

The miniHUB optical distribution system can easily be expanded to include other signal formats or additional signal formats that the camera system in not carrying. This means you can include Ethernet data services, HDMI Multiviewer signals and extra SDI video signals when needed.

### Benefits of miniHUB for Remote event production

The miniHUB can be adapted easily for each event depending on the individual needs. This makes the miniHUB the most flexible and cost effective system on the market today. Listed below are some of the benefits that Norwia customers have enjoyed.

- Easy setup with Norwia's AutoSFP<sup>™</sup> technology
- Multi-purpose single card solution, less spares and less inventory cost
- Superior quality and extreme temperature system that are used by leading Broadcasters and Telecommunication providers.
- Convertible system that can be used as a Camera transport system one week then a high density video distribution next week. Increasing return on investment significantly.
- Zero latency production

There are many different types of camera configuration in general and Norwia will have a solution available. Just consult with Norwia and we will design a system to your specification that will give you all the benefits that a Norwia solution can give.

Norwia systems are used in live product everyday and users rely heavily on the optical fiber knowledge of Norwia. Over 15 years of experience is accumulated in the miniHUB optical distribution system to give our users the latest next generation optical system available.



Discover an easy way for Optical fiber distribution.

giving value ...

# A u t o S F P

Norwia holds unique core technologies such as AutoSFP<sup>™</sup> which is incorporated into the next generation miniHUB optical distribution platform.



miniHUB is a Format flexible, Application flexible and holds the title "lowest cost of ownership on the market today"

**Visit www.norwia.no** for more information on the miniHUB optical distribution system, representative around the world, news on new product releases, product data sheets, customers stories and technical solutions.

Your local representative:



Norwia as Kilgata 12 N-3217 Sandefjord Norway Sales p. +47 33 45 20 90 e. info@norwia.no w. norwia.no



REV1638