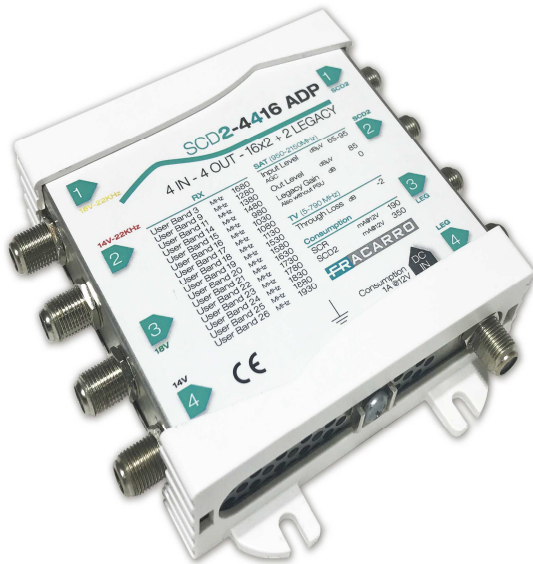# Data sheet

FRACARRO

SCD2 Switch
SCD2-4416ADP/UK

New **compact adaptor** with **SCD2 (dCSS)** technology, **4 legacy** inputs and **4 user outputs**:

- **2 SCD2 (dCSS) outputs: up to 32 users** using only **two cables** (4 SCR tuners and 12 SCD2 dCSS tuners for each output); **also Legacy compatible**

- **2 Legacy outputs**

All **output ports** also have **mixed TV signals**

Automatic Gain Control (AGC): it maintains an adequate output level (**84dBµV**) on SCD2 (dCSS) ports even if the input level varies (from **65dBµV** to **95dBµV**)

This product can be used to **update an existing legacy system to SCD2 (dCSS) technology** in order to make it compatible with **new Sky-Q receivers;** this update is without modifying the switches through loss and **without complex rebalancing** because it is connected to the tap ports

All the **outputs are also available without an external power supply**; if an SCD2 user decides to switch his receiver off, the **Legacy outputs continue to work correctly** (also without an external PSU)
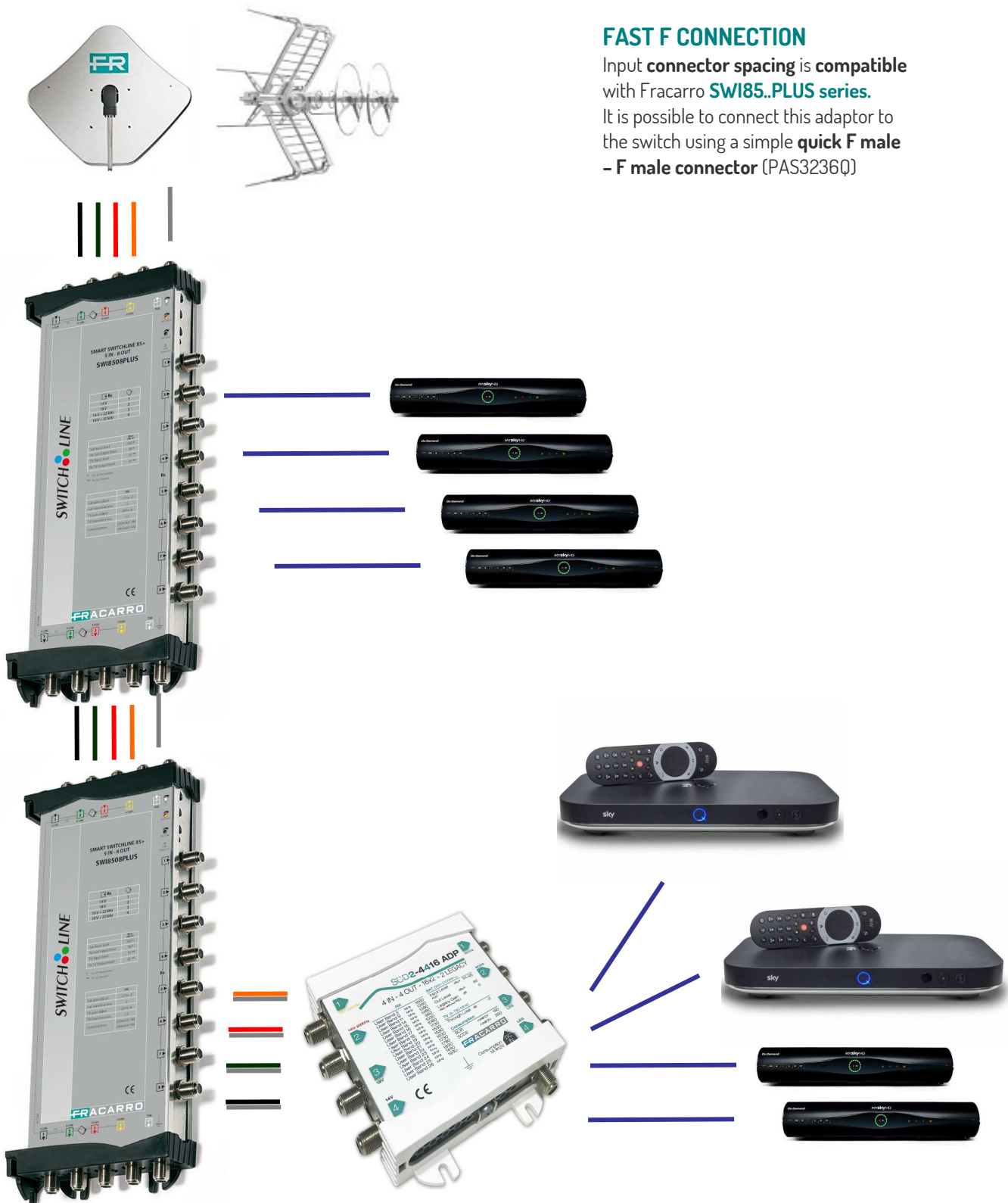
It works with **all Fracarro power supplies from the 12V-18V range**, for example SPS1750

Characteristics

- **4 Legacy** inputs and **4 user outputs: 2 SCD2 (dCSS) outputs** with 16 different frequencies for each output and **2 Legacy outputs. SCD2** ports are also **Legacy compatible** with **automatic standard detection**

- **Automatic Gain Control (AGC):** it maintains an adequate output level (**84dBµV**) on the SCD2 ports even if the input level varies (from **65dBµV** to **95dBµV**)

- **Optional DC port:** the product works with **all Fracarro power supplies from the 12V-18V range**, for example SPS1750

- **Compact dimensions**

- **PWR LED**: on when the product is powered (green)

  PSU LED: on when a PSU is connected (yellow)

- **DC pass** and **QUAD compatibility on all inputs:** maximum compatibility with existing systems; **14/18V 0/22KHz tone generator**, to guarantee the correct voltages even if the receivers feed is low (e. g. with voltage loss caused by long cable drops)

- Easy to install due to **standard colour coding** and thanks to **input connector spacing** which makes it compatible with **most of the Fracarro switch series**

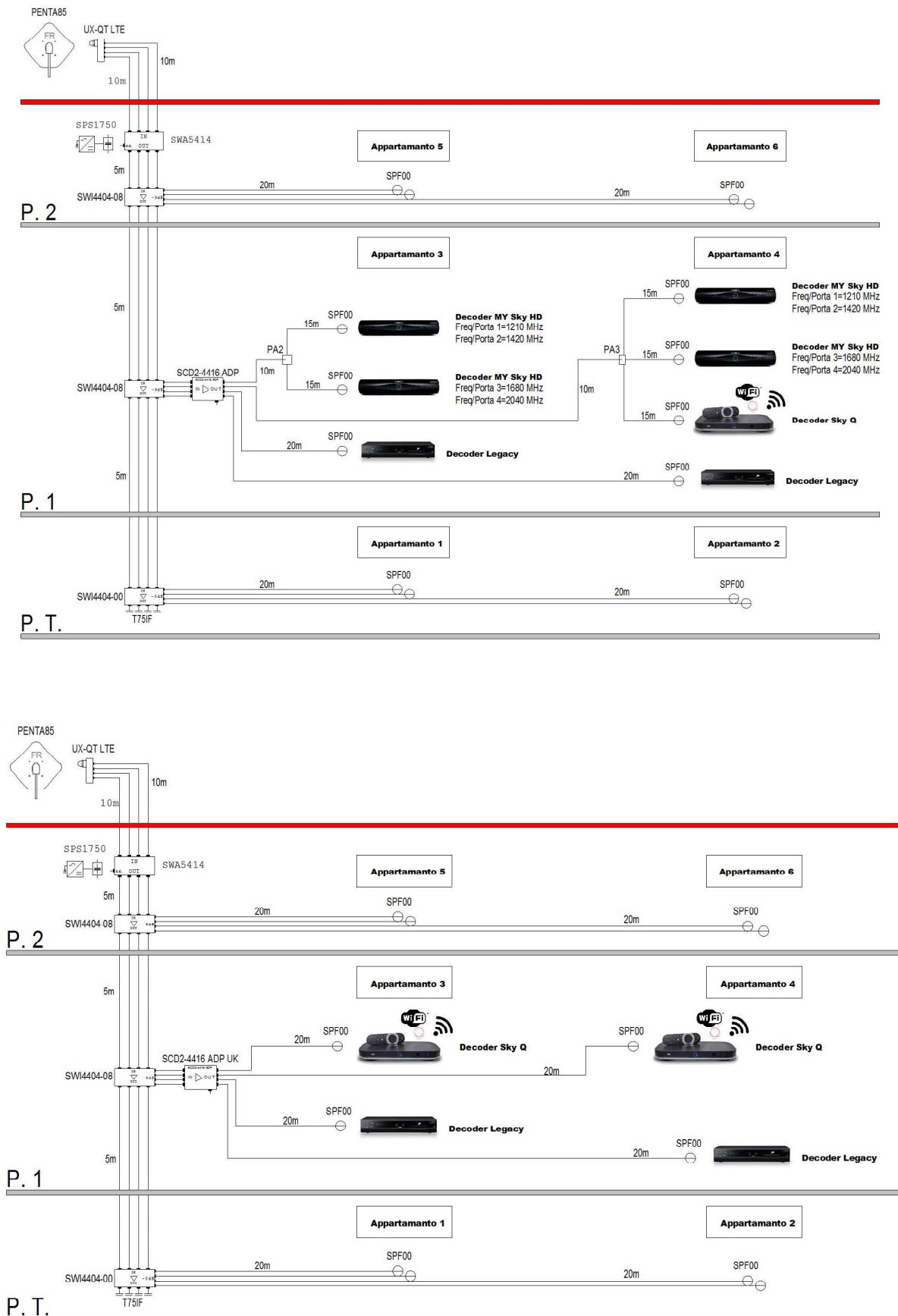|		SCD2-4416ADP	SCD2-4416ADP UK
Fracarro Code		271169	271168
Ports			
Inputs		4 SAT + 1 DC	
Taps		4 SAT with mixed TV signal: 2 SCD2 (dCSS) to serve up to 16 SCR/SCD2 users each and 2 Legacy	
TV			
Taps Band	MHz	5 – 790	
Gain	dB	–2	
Max Input Level (overall power)	dBµV	110	
In/Out Return Loss	dB	>10	
Taps Return Loss	dB	>10	
SAT			
Taps Band	MHz	950 – 2150	
CAG Range	dBµV	65 – 95	
Max Input Level (overall power)	dBµV	101	
SCD2 Output Level with CAG (for each transponder)	dBµV	85	
Legacy Output Level on SCD2 ports with CAG (overall power)	dBµV	85	
Legacy Gain	dB	0 −5 when the product is fed by only Legacy ports	
Max Legacy Output Level on Legacy ports (overall power)	dBµV	101	
SCR and SCD2 (dCSS) Frequencies	MHz	1210, 1420, 1680, 2040 MHz (responding to EN50494 commands); 985, 1050, 1115, 1275 MHz 1340, 1485, 1550, 1615 MHz 1745, 1810, 1875, 1940 MHz (responding to EN50607 commands)	980, 1030, 1080, 1130 MHz 1280, 1380, 1480, 1530 MHz 1580, 1630, 1680, 1730 MHz 1780, 1830, 1880, 1930 MHz (responding to SKY UK commands)
In/Out Return Loss	dB	>8	
Taps Return Loss	dB	>8	
General Characteristics			
Output Isolation	dB	25	
Standard		2 Legacy ports 2 SCD ports 1st and 2nd generation DiSEqC–SCIF	
Taps consumption	mA, V	375, 15 (entirely fed by output taps)	
Input max current absorption	mA	300	
Max taps consumption with 300mA input load	mA, V	850, 15	
DC input voltage	V	12 – 18 (optional)	
Maximum current on DC port	mA, V	1000, 15	
Dimensions	mm	120 x 110 x 30	
Operating temperature	°C	–10 to 55	
Compliance		2014/53/UE	

INSTALLATION EXAMPLES

FAST F CONNECTION

Input **connector spacing** is **compatible** with Fracarro **SWI85..PLUS series.**
It is possible to connect this adaptor to the switch using a simple **quick F male – F male connector** (PAS3236Q)

Available **compatible** with **SCD2 (dCSS) EN50607** frequency standard and compatible with **new English Sky-Q receiver commands**

PENTA85
UX-QT LTE
10m
10m

SPS1750
SWA5414
Appartamanto 5
Appartamanto 6
5m
SWI4404-08
20m
SPF00
20m
SPF00
P. 2

Appartamanto 3
Appartamanto 4
SPF00
Decoder MY Sky HD
Freq/Porta 1=1210 MHz
Freq/Porta 2=1420 MHz
15m
5m
15m
SPF00
Decoder MY Sky HD
Freq/Porta 1=1210 MHz
Freq/Porta 2=1420 MHz
PA2
SPF00
Decoder MY Sky HD
Freq/Porta 3=1680 MHz
Freq/Porta 4=2040 MHz
PA3
15m
SPF00
Decoder MY Sky HD
Freq/Porta 3=1680 MHz
Freq/Porta 4=2040 MHz
10m
SWI4404-08
SCD2-4416 ADP
15m
SPF00
Decoder MY Sky HD
Freq/Porta 3=1680 MHz
Freq/Porta 4=2040 MHz
10m
WiFi
15m
SPF00
Decoder Sky Q
20m
SPF00
Decoder Legacy
5m
20m
SPF00
Decoder Legacy
P. 1

Appartamanto 1
Appartamanto 2
SWI4404-00
20m
SPF00
20m
SPF00
T75IF
P. T.

PENTA85
UX-QT LTE
10m
10m

SPS1750
SWA5414
Appartamanto 5
Appartamanto 6
5m
SWI4404-08
20m
SPF00
20m
SPF00
P. 2

Appartamanto 3
Appartamanto 4
5m
20m
SPF00
WiFi
Decoder Sky Q
SPF00
WiFi
Decoder Sky Q
SWI4404-08
SCD2-4416 ADP UK
20m
20m
SPF00
Decoder Legacy
5m
20m
SPF00
Decoder Legacy
P. 1

Appartamanto 1
Appartamanto 2
SWI4404-00
20m
SPF00
20m
SPF00
T75IF
P. T.

All **output ports** have **mixed TV signals** enabling
this adaptor to be used **with both 4 and 5 wire input switches**

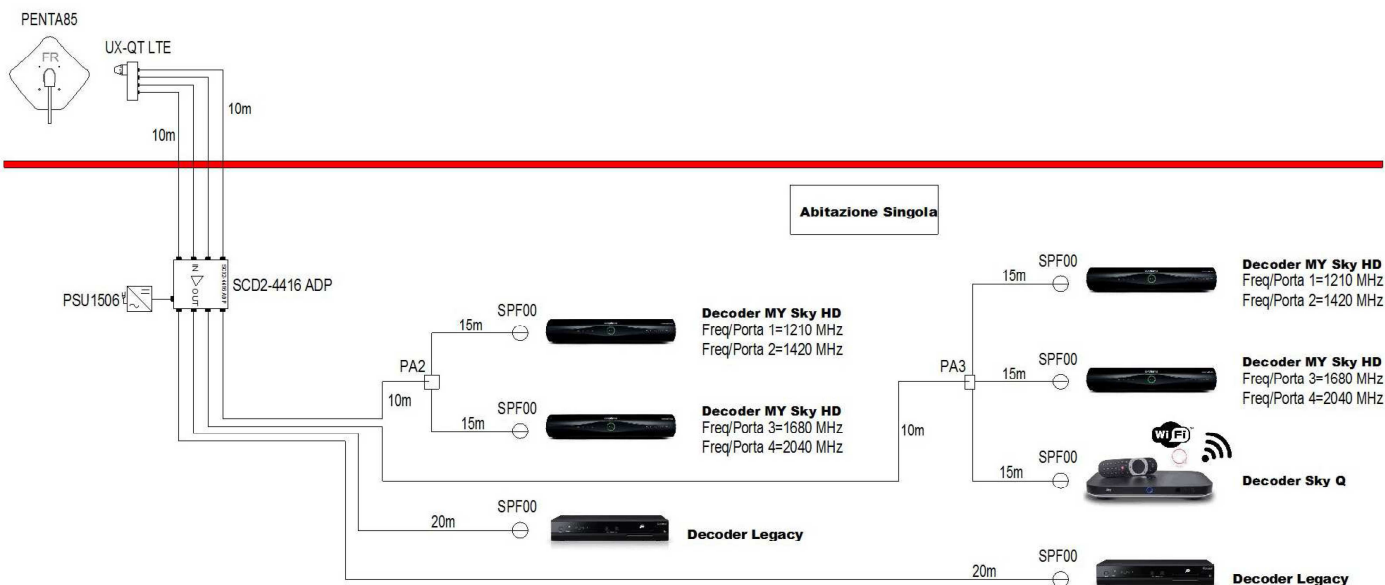PENTA85

FR

UX-QT LTE

SIGMA 6HD LTE

BLV6F

10m

10m

10m

10m

SWA5414

SPS1750

CA75F

MBJ3r345U LTE

MB3 EVO

ABLA

3 4 5 U

Appartamanto 5

Appartamanto 6

5m

5m

SWI508SA

IN
OUT

TV

20m

PDM00

20m

PDM00

P. 2

Appartamanto 3

Appartamanto 4

5m

PDM00

Decoder MY Sky HD
Freq/Porta 1=1210 MHz
Freq/Porta 2=1420 MHz

15m

PDM00

Decoder MY Sky HD
Freq/Porta 1=1210 MHz
Freq/Porta 2=1420 MHz

SWI508SA

IN
OUT

TV

SCD2-4416 ADP

IN OUT

PA2

10m

15m

PDM00

Decoder MY Sky HD
Freq/Porta 3=1680 MHz
Freq/Porta 4=2040 MHz

PA3

15m

PDM00

Decoder MY Sky HD
Freq/Porta 3=1680 MHz
Freq/Porta 4=2040 MHz

10m

15m

PDM00

WiFi

Decoder Sky Q

20m

PDM00

Decoder Legacy

5m

20m

PDM00

Decoder Legacy

P. 1

Appartamanto 1

Appartamanto 2

SWI508SA

IN
OUT

TV

20m
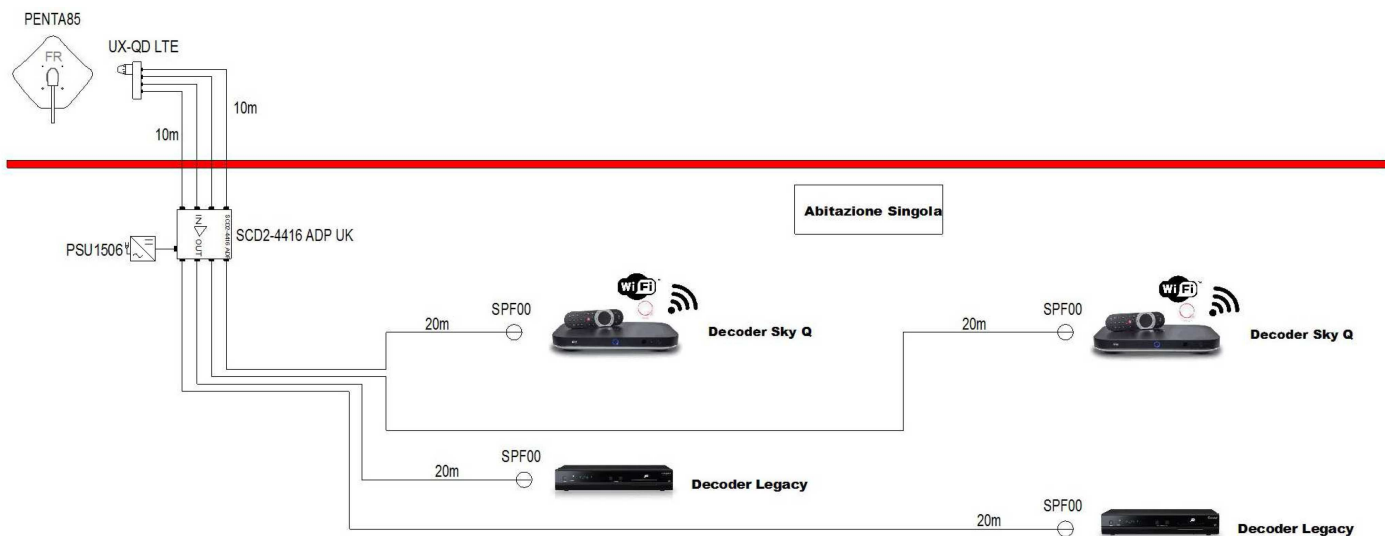
PDM00

20m

PDM00

P. T.

T75IF

This product can also be used as a **stand alone switch** and is compatible with both **UX-QT LTE** (QUATTRO LNB) and with **UX-QD LTE (QUAD LNB with 4 universal outputs)**; it can be used to **update an existing Legacy system** to new SCD2 (dCSS) technology **without any update on the signal reception part**

On the following examples the PSU1506 is used to feed the LNB, in this case the PSU **also powers the switch**

PENTA85
UX-QT LTE
10m
10m

PSU1506
SCD2-4416 ADP

Abitazione Singola

15m SPF00
Decoder MY Sky HD
Freq/Porta 1=1210 MHz
Freq/Porta 2=1420 MHz

PA2
10m
15m SPF00
Decoder MY Sky HD
Freq/Porta 3=1680 MHz
Freq/Porta 4=2040 MHz

20m SPF00
Decoder Legacy

15m SPF00
Decoder MY Sky HD
Freq/Porta 1=1210 MHz
Freq/Porta 2=1420 MHz

PA3
15m SPF00
Decoder MY Sky HD
Freq/Porta 3=1680 MHz
Freq/Porta 4=2040 MHz

10m
15m SPF00
Wi-Fi
Decoder Sky Q

20m SPF00
Decoder Legacy

P. T.

PENTA85
UX-QD LTE
10m
10m

PSU1506
SCD2-4416 ADP UK

Abitazione Singola

20m SPF00
Wi-Fi
Decoder Sky Q

20m SPF00
Wi-Fi
Decoder Sky Q

20m SPF00
Decoder Legacy

20m SPF00
Decoder Legacy

P. T.