

Item and link	Quantity	Unitary price (£ with VAT)	Comments
New workshop			
Aggregation	1	258	New workshop: This is a fibre-only switch, critical to the new fibre architecture, as we will have seven incoming fibre cables (Aroga, BV, RC, Karunasom, Samaggi, sala and admin block.)
10G Direct Attach Cable	1	12.48	New workshop: to connect the full fibre switch to the fibre/copper switch with a full 10G speed, thus maximising the SFP+ ports. Avoid the need to get optical modules as this cable is already pre terminated (hence its name "direct attach")
Pro Max 16 PoE	1	382.80	New workshop (there will be servers, NAS, etc. there so I would rather have redundancy in ethernet ports)
Pro Max 16 Rack Mount	1	46.80	To fix the above switch to the network cabinet
1G Multi-Mode Optical Module	5	17	Unfortunately, one cannot just connect a terminated fibre cable directly to a switch (like one would do with an Ethernet cable) but they need to go through these optical modules. One pair for 5 out of the 7 fibre connections between the new workshop's switch and the ones in the various buildings connected to it as per the new network map (the 6th and 7th are the new sala's and Aroga's, which will be brand new switches supporting a 10G SFP+ port. The existing switches in the older buildings only have regular 1G SFP ports. I expect that we'll upgrade this hardware when we reconstruct these buildings.)
10G Multi-Mode Optical Module	2	36	As explained above, 10G SFP+ connection between the new workshop to aroga, and new workshop to new sala
Dream Machine Pro (UK version) -> Second link if out of stock on Unifi store	1	363.60	This router supports 100 UniFi devices; we currently have just under 50 on a router that is easily over 5 years old. I am concerned that with the increase in access points and Ethernet connections it will start to really suffer (it is already struggling and buggy; for instance it is no longer able to identify the traffic on the network. As such I would recommend upgrading our main router so as to be able to handle the new network well.)
Aroga			
Pro 8 PoE	1	286.80	The <u>current</u> switch does not have a fibre port.

New sala			
Pro Max 48 PoE	1	1,246.80	New sala (tons of ethernet sockets and WiFi APs there)
U6+ WiFi APs	5	94.80	WiFi access points for the new sala
U6 Long-Range	1	172	To cover the outdoor area outside of the new workshop (i.e. garage)
APC Back UPS 1200VA / 650W	1	138.97	Uninterruptible Power Supply. Our standard for each network cabinet to handle power cuts. Higher capacity as we'll have the router, synology (NAS) and linux server there
APC Back UPS 1600VA / 900W	1	180	UPS for the new sala's network cabinet. More power is needed as there will be many WiFi access points fed by the switch
Total		~3800	